

AMERICAN ARTISAN and Hardware Record

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TANBO

Has Gone Over The Top

GONE over the top of what, you ask?
Gone over the top of every other register finish,
I promptly answer.

But what of it, you ask; is it anything to make such a big blow about?

To which I again promptly answer you, by asking you a question.

Every time you have a chance to get something better for the same money, you get it, don't you?

When you can get something better for less money, you get it too, don't you?

What you do, is exactly what pretty much everybody else does.

It's exactly what they have done with our Tanbo Finished Registers.

They are getting something better for less money.

That's why Tanbo finished registers have gone over the top.

Of course, if you don't care whether you give your customers more for their money, or if you make any more money than you are making, then Tanbo won't interest you. Have you stopped to think what you are going to do when some of your customers insist on Tanbo finishes?

TUTTLE & BAILEY MFG CO.

Tee Bee

36 Portland St
BOSTON

Established 1846
2 W. 45th St.
NEW YORK

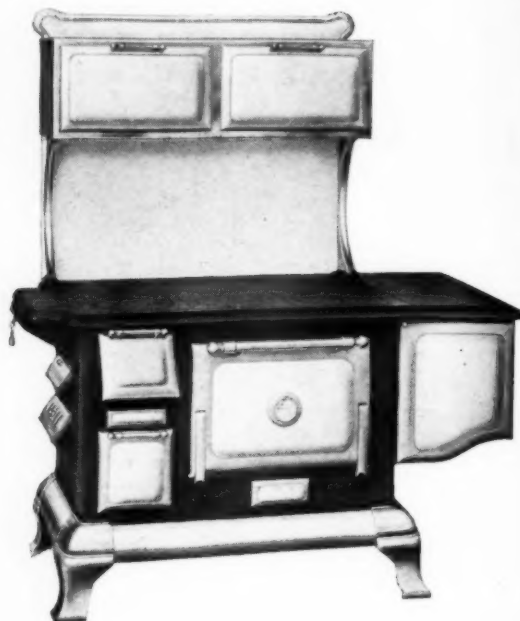
1123-29 W. 37th St.
CHICAGO

COPPER-CLAD

The World's Greatest Range

COPPER-CLAD, with its superior construction, the rust-proof sheet copper inner wall, and its incomparable beauty is helping dealers everywhere to DOMINATE the range business in their communities.

If Copper-Clad is not already sold in your town, there are "36 Reasons Why" you should wire, or write us—today—for the attractive Copper-Clad proposition.



Made in three finishes;

White Porcelain Enamel

Blue Porcelain Enamel

Gun Metal Blue



The Copper-Clad Brank



The Copper-Clad Malleable Range Co.
Saint Louis, U.S.A.

Founded 1880 by Daniel Stern

Thoroughly Covers
the Hardware, Stove,
Sheet Metal, and
Warm Air Heating and
Ventilating Interests

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YOU CAN SELL ONE MORE RANGE THIS SPRING

Our editorial, "You Can Sell One More Range This Spring," which was published in the January 27th issue of American Artisan and Hardware Record has received considerable favorable comment—so much in fact that we feel certain it will have to its credit the accomplishment of the purpose for which it was written and published.

At the hardware conventions which have been held recently in the various states many merchants expressed themselves on the subject in such a manner, that it is fair to assume that a large increase will be noted in the range business this Spring.

Everything points toward it.

In the industrial centers the construction of houses and apartment buildings is unprecedented in spite of the high cost of labor and material, and this, of course, means heavy sales of ranges.

But even in places where building activities are not so marked—in the smaller cities and the rural sections—there are thousands upon thousands of openings for the sale of a new range, either for coal exclusively, or for gas exclusively, or for gas and coal combinations, or for oil burning cooking stoves.

The one thing needful to secure your fair share of this profitable business is a real, honest-to-goodness, selling campaign conducted by you, either alone or in conjunction with the manufacturer from whom you purchase your stock—preferably the latter.

The day has gone by when ranges and cooking stoves can be sold profitably by waiting

for the customer to come into your store and tell you that he wants to buy one.

If you have a stove department there is only one way by which it can be made to yield a real profit—

And that way is to go out and hunt for prospective customers.

There are too many instances of failure on one hand and of successes on the other hand to make this statement a subject of debate.

The retail mail order house has built up its wonderful success by going after the customer, and not only that but it has gone after him hard.

Where would the despised "Stove Peddler" get his profits from if he did not seek out and locate people whom he could persuade into buying his ranges?

And every range sold by the mail order house or by the range peddler is a standing advertisement of the failure of the local dealers to serve the people in that particular community in the manner in which they are entitled to be served.

"You Can Sell One More Range This Spring."

All you have to do is to make a real, honest effort to find that extra customer.

And chances are that you will find not one, but several, households where a new range can be sold if the proposition is presented in the right manner.

There are two months more of real stove selling days this Spring.

Make every one of these days count for you!

Random Notes and Sketches.

By Sidney Arnold

I have a little doubt—or might have if I did not know him so well—as to how Ed Hoffeld expects me to address him next time we meet.

Tony Howe, of J. M. & L. A. Osborn Company, informed me the other day that Ed had recently been elected President of the Ferdinand Dieckmann Company, and that he was reported to be requiring considerable more "bucking and scraping" on the part of his employes and associates since acquiring this new dignity. Maybe, however, that Tony was just trying to put one over on me, for if there ever was a "democratic" fellow that man certainly is the former "General Manager," now "President, etc."—"the whole cheese," to use a more or less common expression.

Anyway—here's my best wish, Ed, for many pleasant years as President of a fine old concern that makes a good line of necessary things for sheet metal men.

* * *

A Colorado girl who had figured in a romantic runaway match was, upon her return home, telling her closest chum all about it. The latter interrupted to ask:

"When you eloped with Harry, did you leave a note telling your people where you had gone?"

"Why, of course, dearie! How stupid you are! If I hadn't, how in the world would Dad have known where to send us money?"

* * *

Max Baugh, of the Meyer Furnace Company, sends me the following story:

A city attorney wrote a rustic justice of the peace asking him about a judgment that had been entered against a client in the latter's village, and enclosing a two-cent stamp for reply. Several days later there came back a postcard bearing the message:

"Your inquiry received. I beg to inform you that my time is

mighty valuable just now. Corn-cutting is most nigh here, politics is sizzling and the bass-fishing is fine. If you enclose a dollar bill it might stimulate me some. I paid ten dollars once to a lawyer for answering a question, and all he said was 'No.'"

* * *

"It is always well to remember in some substantial way the services of faithful employes," says John P. Wagner, President of the Success Heater folks, "but when you do let it be in a way that is different from that of the bank president in the following story:

"A banking office in a Southern city contains two men who started together. One has amassed a fortune and is now president. The other is still a poorly-paid bookkeeper.

"At last the twenty-fifth anniversary of the founding of the firm arrived and the bookkeeper remembered it, but thought no one else did. He was surprised when the president, whose reputation for close-fistedness was well known, called him and said:

"Harrison, do you know that this is our twenty-fifth anniversary together? I have thought fit to commemorate the event and have put in this envelope a small gift for you to express my appreciation of your faithful services."

"Overcome, the other looked in the envelope and found a photograph of his employer.

"Well," demanded the latter, 'what have you to say?'

"It's just like you," murmured the bookkeeper. 'Just like you.'"

* * *

E. B. Langenberg, of the "Front Rank" people, has a friend by the name of Bailey who raises chickens as a pastime.

One day, Mr. Bailey stamped into Lawyer Burke's office and demanded advice.

"If someone's dog gets into my chicken coop and kills my chickens the law says I can collect from the owner in full, does it not?"

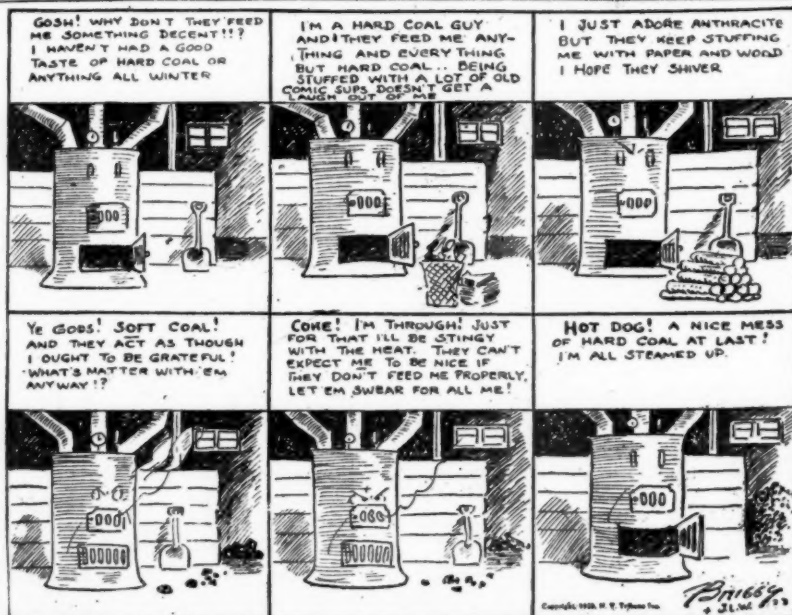
"It certainly does," replied Burke.

"That's just what I wanted to know. Your terrier just killed several of my prize leghorns, and it will cost you \$10 damages."

He paid.

The first of the following month Mr. Bailey received a bill from his lawyer "For Professional Services Rendered, \$10."

WONDER WHAT A FURNACE THINKS ABOUT



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Facts of Warm Air Heating and Ventilating.

Reports of Progress in Warm Air Heater Research Work.
Ventilating Factories, Theatres and Other Buildings.

W. M. Warren Has Charge of Henry Furnace Interests in Northwestern States.

W. M. Warren has been appointed Manager of the Northwestern territory for the Henry Furnace & Foundry Company, with headquarters at 106 Third Avenue, North, Minneapolis.

Mr. Warren will carry stock

there and will look after sales in Minnesota, Wisconsin, Iowa, North and South Dakota.

This move has been made necessary by the steady increase in the Company's business in these states, and the added convenience of a well stocked warehouse in a central, nearby point will no doubt be appreciated.

M. C. Honeywell Predicts Fan Installations on All Jobs in Houses of Six Rooms or More.

Heating Specialties Manufacturers Believe Perfection of Warm Air Heating Industry Lies in Induced Air Distribution.

THE following self-explanatory article is taken from a letter written to AMERICAN ARTISAN by M. C. Honeywell, president of the Honeywell Heating Specialties Company of Wabash, Indiana. Because of the increasing interest in the discussion of the value of induced warm air distribution we are glad to reproduce it for the benefit of our readers:

The writer has read with interest the article on warm air furnace installation, with fan, which appears on page 26 of your January 27 issue.

We are very pleased to have you run such articles in your paper, for they help to bring to the attention of the trade the merits of the method of induced warm air distribution which we predict will very soon be quite generally used with all types of warm air furnace jobs, unless it would be for furnaces in the smallest buildings.

A statement is made in the article, above referred to, about which we have some doubt as to its being correct, and it is made in the last paragraph and refers to the fan being placed at the extreme end of the warm air outlet, which arrangement does not drive the air past the

furnace at a very high velocity without being properly heated, as is often the case when the fan is placed in the cold air inlet.

The writer and our engineers are of the opinion that it makes little difference where the fan is placed, so far as the circulation is concerned, since as much air must enter the return as is discharged from the register or registers.

By arrangement referred to in the Haynes-Langenberg job, it is barely possible that the distribution of the air in the furnace might be slightly better near the damper, but the upper 75 per cent of the furnace would be little better served, we believe.

While the feature above referred to might be in favor of the fan at the exit, there is certainly one great disadvantage in the plan, and that is, with the fan at the outlet there is a vacuum formed in the furnace which has a tendency to draw gases from the firepot into the circulating air, when, with the fan at the inlet, there is a pressure on the air in the furnace which has a tendency to keep the gases in the firepot, all of which is, undoubtedly, a great advantage.

We could write you at great length with reference to our auto-

matically controlled Aerofan installations which we have made in different sections of the country. When you called on the writer a few months ago, you predicted that fans would be used for certain defective and large installations, but, in your opinion, would not become generally used in connection with domestic installations. The writer was inclined to agree with you at the time, although he felt that the demand eventually would be greater than you anticipated.

Our experience during the past two months leads us to believe that the time will soon come when the best furnace dealers in the country will include an automatically controlled fan outfit for every furnace installation that is to go into a house containing over six rooms. We already have dealers who are refusing to figure any more jobs of any consequence without including our equipment and this has all come about by the experience these dealers have had with the Honeywell method of induced warm air distribution in their own homes, as well as the homes of others.

We are still receiving inquiries from the first ad placed in AMERICAN ARTISAN AND HARDWARE RECORD. This is evidence of the interest manifested in a good article advertised in a good paper.

Yours very truly,

HONEYWELL HEATING SPECIALTIES COMPANY.

(Signed) M. C. HONEYWELL,
President and General Manager.
Wabash, Indiana.

Lathrop Furnace Company Answers Bitterlich Inquiry.

TO AMERICAN ARTISAN:

In answer to inquiry of H. Bitterlich, Colorado, in your issue of February 3d, we answer yes. We have recently completed one in a two-story ten-room house of 23,000

feet capacity, with living room, dining room, reception hall, breakfast room and kitchen all on same level as the furnace room. And it is a perfect success. We used the gravity principle, combined with a "Booster Fan."

The Lathrop Furnace Company, by Lathrop.
San Antonio, Texas.

Offers Less Expensive Turton Problem Solution.

TO AMERICAN ARTISAN:

Please find enclosed a rough sketch of lower floor of Mr. Turton's plan and the way I would put in the job. Placing the main register

Let Us Hear from You As to Value of Hand Damper.

In the February second issue of the *Chicago Daily Tribune*, Dr. W. A. Evans, former Health Commissioner of Chicago, publishes the following letter from a furnace installer:

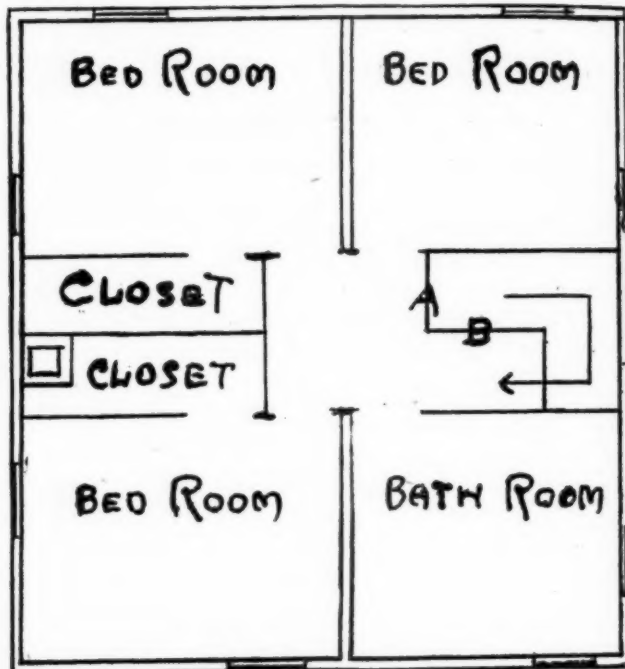
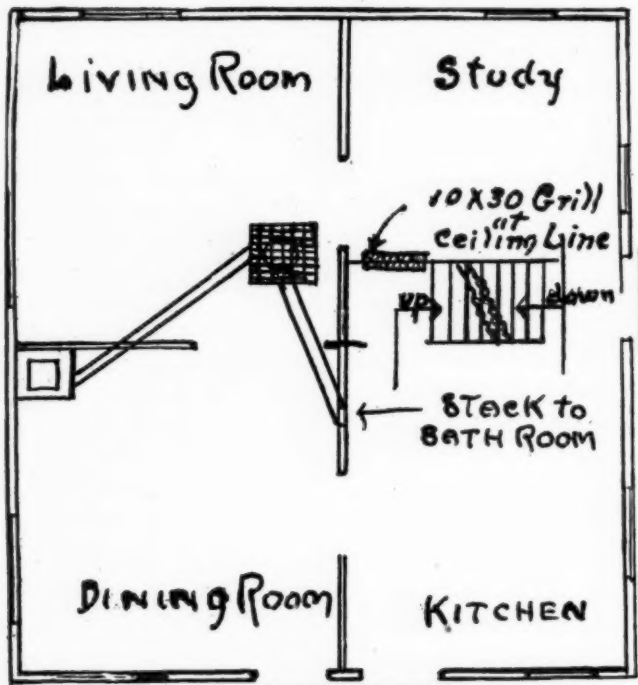
Believes Damper Dangerous.

W. W. writes: You quote with approval as follows: "A hand damper should be installed in the smoke pipe to regulate the intensity of the draft. This should be installed in addition to any other mechanically operated dampers that may be in use."

The first furnace I ever put in

had it put in. All went well while the owner handled the furnace. But when he was away one day a call went out for the doctor, who, on entering, threw the doors and windows open just in time and set about the task of reviving two women asphyxiated by gas and another who had fainted through fright.

On becoming my own boss I never put a damper between the furnace and the flue. If specifications had called for it and the purchaser had insisted, I would have refused the contract. Why should I be an accessory to turning somebody's house into a death trap?



How Charles Wilson Would Solve Pipeless Furnace Problem.

in the living room, I would use a 9" pipe to stack to register; in bath 9x12 or wall register. Then I would place a 10x30 grill at the ceiling line between study and stairway.

Take enough off the bottom of stairway door to make it 2½ inches from floor. This I think would make an ideal installation for this house and it would be cheaper to install than would a pipe job, and be a more economical one to operate.

Trusting this is not coming too late for insertion, I am,

CHARLES WILSON.

—, Illinois.

had such a damper, besides the usual check. The check is a variable opening into the smoke pipe, by which air is admitted to the pipe from the furnace room, in order to diminish the force of the draft. In addition to the check, all furnaces have the opening in front controllable by the use of shutters. In the case mentioned, though then without experience in the business, I protested to the boss that the damper was a source of danger, because, when closed, would force the smoke and gases out into the basement, whence they would find their way into the rooms above. But he

The device is unnecessary because the other means of regulation are ample to reduce the speed of the air current through the furnace, which is all that is needed. The only damper that is safe between the fire and the flue in any stove or furnace is one that changes the flow of gases from a straight course to a longer and wide open one around an oven or radiating drum. Any damper that chokes the passage without provision for the current to flow freely up the chimney is a danger doubly reprehensible because useless, since the other checking devices are all that are required for

economy, or anything else, if they are kept in order and handled with reasonable judgment. If the janitor has not judgment sufficient enough to get results from them, he should not be trusted with the handling of a furnace, certainly not with one fitted with a device so dangerous as the damper recommended.

Furnace Installer of 21 Years' Experience Gives Some Pointed Pointers.

TO AMERICAN ARTISAN:

Enclosed are a few facts which I think will interest AMERICAN ARTISAN AND HARDWARE RECORD readers.

In this article I am submitting some facts which in my twenty-one years of practical experience have come before me and have proven of value and hope will be of benefit to other readers of AMERICAN ARTISAN AND HARDWARE RECORD.

The first I consider one of the most important is the capacity and location of cold air returns. In my experience I have found and feel safe in saying seventy per cent of the unsatisfactory furnace installations are due to insufficient or improper location of cold air returns. In some cases pipe will have capacity as to size but cut down by boxing in 2 x 2 x 8 joist spaces having 210 inches against 314 inches in pipe, therefore reducing capacity one-third. And connection at casing being made with collar which extends above grate level causes reaction of air in pipe.

Therefore, all cold air returns should be made with shoe connections at casing not to exceed 12 inches in height, and in placing cold air collar or flange to joist, care should be taken not to leave flat surface of joist. It should be beveled at least 2½ inches up to center of joist, not one side. As you can readily see, if you give it a thought, that by leaving joist flat on 16 inches collar you cut capacity 26 inches. I also favor locating cold air faces on inside walls when feasible as hot air will rise to ceiling; go to far points of room following

down walls and being drawn across floor by inside cold air return will eliminate cold draft on floors. In other words, by placing cold air on outside wall your cold and hot air both traveling the same way and to same point of room, one on floor, other at ceiling; therefore, robbing you of chance for circulation of hot air on floor. Hot air runs should be as short as possible and care taken not to place them in direct travel of cold air.

Also have found many hot air pipes robbed of elevation by not getting them as high as possible at box or boot connection. Care should be taken to use the fitting at register that will give the most elevation. If using side bonnet, I also find that by taking all runs off at the same angle to head room and then gradual elevation to box or boot connection, you get a more even distribution of heat, faster circulation, and, therefore, more heat. I find that in some cases where damper is used in smoke pipe, it is placed on chimney side of check, it should be on furnace side, so as not to cause friction or back draft.

Yours truly,

H. A. FOSTER,

H. A. Foster and Company.

Agent, Gilt Edge Furnaces.

Des Moines, Iowa, February 17, 1923.

The Load on a Ton of Coal.

A ton of coal has to carry, according to the *New York World*—

1. The mine owner.
2. The miner.
3. The helper.
4. The powder.
5. The mule.
6. The breaker.
7. The operating company.
8. The selling company.
9. The railroads.
10. The coal yard.
11. The shoveler.
12. The truckman.
13. The man who puts it in.
14. The janitor.

before it becomes "hot air."

Then it is 70 per cent wasted!

U. S. Chamber of Commerce in Simplification Drive.

The Domestic Distribution Department of the Chamber of Commerce of the United States has launched a movement among the distributors of the country looking to the elimination of excess varieties in all lines of merchandise. In this connection, the department has just issued an illustrated pamphlet in which great stress is placed upon the savings and increased profits which can be effected by an active study of simplification.

It is stated in the pamphlet that "today, through useless competition, variety has been piled upon variety, visiting upon distribution much expense and confusion of effort."

To substantiate this contention, the pamphlet cites the following appropriate example:

"In a certain industry there had been futile attempts for several years to reduce the number of forms such as order blanks, receipts, shipping manifests, etc., to some sort of uniformity and consistency of practice. Hundreds of varieties were in use but not more than six or eight were needed. The problem was precisely the same in every establishment so far as their relations with customers were concerned. Yet although there was a strong demand within the association for a reduction in the number of these forms, some trifling but unconquerable reasons existed to explain their inability to proceed. Upon appealing to this Department, a method was devised which involved a conference between the representatives of this Department, of the industry and of the Department of Commerce, as a consequence of which a committee was appointed which after a few months' study has reduced the several hundred forms to a maximum of eight and which, presently, will offer its report for adoption by the associated industry as a whole."

If you think you have nothing to learn about how to manage your store, you are in training to become a grandfather man.

Where Does Dust In a Warm Air Heating Plant Come from and What Is Remedy?

Kansas City Warm Air Study Club Holds Interesting and Profitable Discussion Led by L. W. Millis.

Part I.

THE following interesting discussion of dust was developed at one of the bi-monthly meetings of The Security Stove and Manufacturing Company Warm Air Study Club of Kansas City, Missouri, led by Mr. L. W. Millis.

It is necessary for men to exchange ideas and experiences in order to have a half-way comprehensive knowledge of the best practice in any branch of endeavor. The product of any producer is famed for the service that product gives the consumer. I believe that you men here tonight are capable of giving to our product—to your product—a reputation that will be a very great source of satisfaction to all of you. I believe I speak what is in every heart here when I say that a good profit on a job has never been a source of joy to me unless the customer received good service. On the other hand, no loss on a job has been a complete loss unless we have failed to make the job do for a customer all that it should do.

It has been suggested to me that we could spend a few minutes profitably, assembled as a sort of club, to try to gather together scraps of information which will enable us, working together, to give to our customers the very best heating plants in the world. Certainly every man of us would feel a justifiable pride, not vanity, but pride, in participation in such an achievement.

We have gathered here this evening just as a sort of tryout. If the time spent is profitable to you I am very willing to sit up nights preparing the literature (if we may dignify it by that name) on as many subjects as may be agreeable.

For this evening we have as our subject—Dust.

Dust may be classed as solid, liquid, vaporous and gaseous. Absolutely everything in the world is wearing down to dust. A coin

becomes smooth, rocks crumble, liquids turn to vapors, and combustible material turns to gaseous particles. All these are counted as dust. No instrument has ever ascended so high in the air that it was free from dust. It is found even in the arctic regions.

The dust in the atmosphere deflects the rays of light and delights us with the red and yellow rays of morning and evening, and encourages us with the blue rays of mid-day.

The ultimate size of dust is beyond comprehension. It is estimated that a single puff of smoke from a cigarette contains millions of particles of dust. These little particles of dust group themselves into clusters or strings of considerable size. These dust particles, which so delight us by breaking the sunlight into myriad colors, and challenge our admiration on account of their never-ending activities and of their infinite smallness, also cause us and our friends endless—that is the proper word—*endless* trouble.

Women war incessantly to keep our houses, rugs, curtains, walls, clothing, in fact everything half-way fit to use. It is exactly in this connection that the furnace man becomes either a great benefactor or a malefactor in his relation to his fellow men.

A vast number of people say, "Oh, yes, a warm air furnace is all right for heat but it is so dirty." Now you know that to be true in altogether too many cases. But I also believe you know that it is the abuse of the qualities of a furnace to produce heat that makes this such a common source of complaint. When air is warmed inside the casing of a furnace it expands and of course becomes lighter. It therefore rises and other air pushes in to take its place. If there was little dust in the air that was warmed it is plain that there will be little in it after

it is warmed. The act of warming air adds no dust to it. It may be warmed by a steam or hot water radiator, or by a stove or a fireplace, or by passing over the warm surfaces of a warm air heater, or by the rays of the sun itself. None of these will, under proper conditions, add dust to the heated air.

How ridiculous it would be for one to say, "Oh, yes, the sun's rays are good heat producers, but they are so dusty." Yet it would be just as sensible as to say that furnace heat is dusty. The fact is that dust is present in all air and becomes more noticeable when in motion.

I can't tell you why heat affects particles of dust the way it does, but I can tell you why it acts as it does. When a particle of dust is heated by a warm air furnace or a steam radiator, or by a ray of sunlight, it seems to receive a certain charge of, let us call it electricity, and is repelled from the heated surface, and carried away by a current of air. If it comes in contact with a cool surface it changes its charge of electricity and may stick to the cold surface similar to the way magnetized particles hang together.

If you look at the wall back of a radiator you will find the wall discolored with millions of particles of dust, and no one ever thinks of charging the radiator with smoking. If heat is brought to a register by air we might easily think that the dust particles, necessarily present in the air, had just as good a right to adhere to a cold surface as though they had been heated by an expensive steam radiator. But any properly *uninformed* housewife will tell you that the marks above the register are not good, decent, respectable and necessary dust, but that it is smoke. You might convince her that you think it is dust, but she will still assert that she knows smoke when she sees it. The plaster clinches, the lace curtains, the dust ropes in corners of rooms and back of pictures, and the discoloration at registers and at radiator, might be exactly alike in a steam heated and in a furnace heated room.

(To Be Continued)

Practical Helps and Patterns for the Tinsmith.

Aids to the Improvement of Craftsmanship and Business.
News from Various Branches of the Sheet Metal Trade.

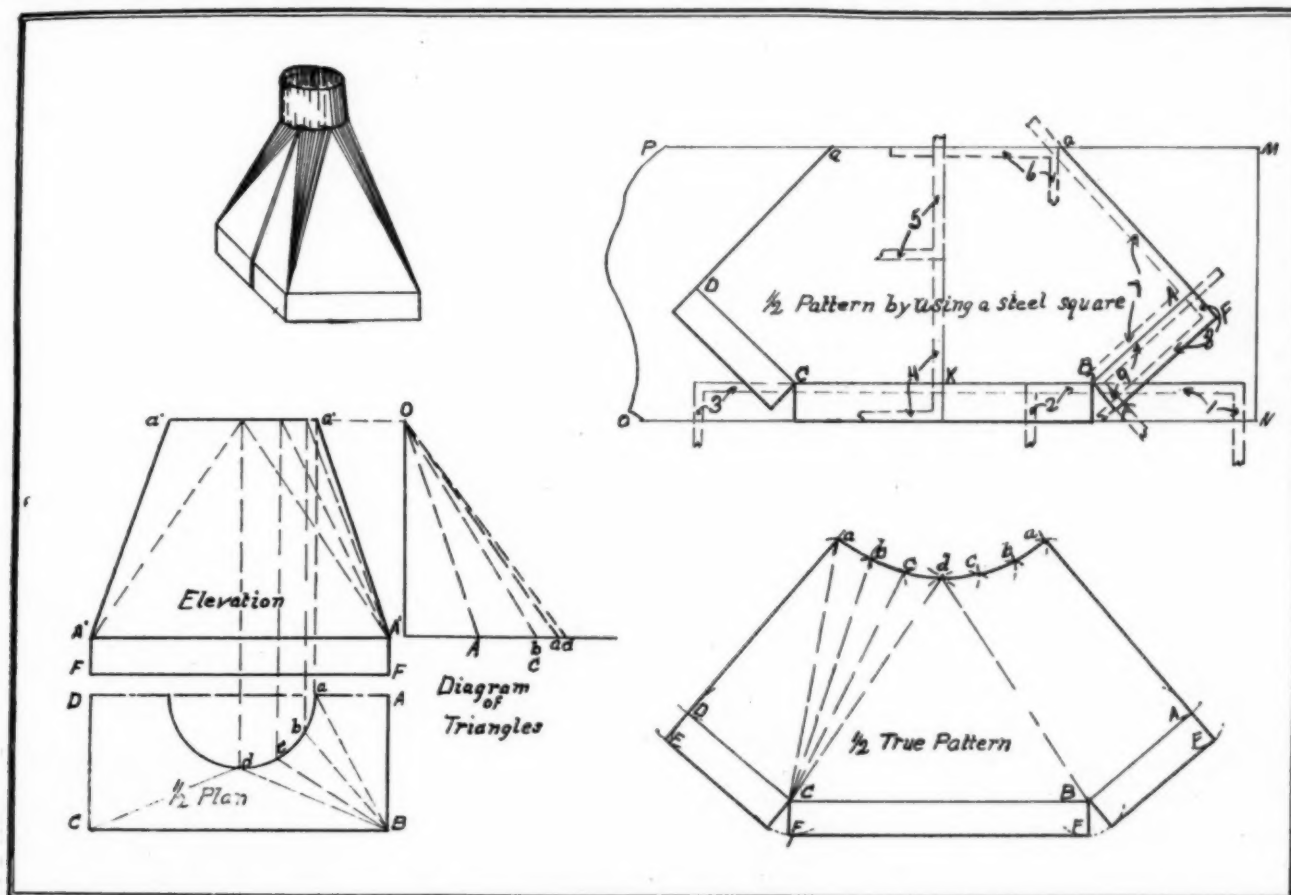
Patterns for Chimney Base.

By O. W. Kothe, Principal, St. Louis Technical Institute, St. Louis, Missouri. Written especially for American Artisan and Hardware Record.

In villages and cities and even farm houses, the brick work of the chimney is often left too low, and a galvanized iron extension must be built up to add greater height to the chimney. As the chimney is square

common, while others less skilled make the base in four pieces and then sort of round in the top. Still more skilled workmen prefer to use triangulation. It may take a little longer, but with considerable practice, this time can be cut down to work out with the steel square. The one greater feature about using triangulation is that you make your transition to definite measurements, that is, you give the exact measurements to the base, the height and

iron, say 30 inches wide. Now the straight apron on the transition is generally made from $3\frac{1}{2}$ to 4 inches deep to fit over the first 2 courses of brick. So mark up a line 4 inches from the base N-O with the steel square in position 1. Reverse the square in position 2 and mark the line after which slide the square along, marking the line as you go, as to position 3. Now measure the distance of half the width of base to point B. Then measure the length



Designs for Chimney Base.

or rectangular and the extension is generally made round, then a transition must be developed from square to round as in the sketch of this drawing as a connection between the two.

Now these bases can be laid out in a dozen different ways; some workmen prefer the steel square method, which is about the most

the diameter of the top base. With the steel square method this is not possible, as only the lower base can be made to definite measurements. The height and the diameter of the top will only be approximate, but still for smoke stack work, no harm is done.

To lay out a base by steel square, let M-N-O-P-M represent a sheet of

as B-C and find the center X. Place a square in position 4 and 5 and draw the center line. Now figure the circumference for the round pipe which is the diameter times pi or 3.1416 and take one-quarter of this circumference and place on each side of the center line, with the steel square as in position 6. This gives points a and a. Very often this dis-

tance a-a is made a fraction less one-half the circumference because the exact cut of the top is not known, and in trimming it, there is always a loss in diameter and consequently the opening will often be a fraction larger than desired. This necessitates a slight taper joint as the first pipe on the base. But by making this half circumference say a half inch smaller, this is overcome, and the top can always be trimmed a little more if desired. Next place the steel square in position 7 where the heel is set as A-B, making this distance equal to half the width of base. Then draw the line a-A-B, after which drop the steel square the 4 inches and mark a line F-F as in position 8. Now by reversing the square to position 9 that square cut at the base is made. Laps must be allowed for seaming and riveting. At the top no curve is cut in until after the base is assembled and the first joint of pipe is set on and marked. In this way an accurate cut can be made.

To lay out this base by triangulation, draw a half plan to take on the measurements as A-B-C-D and strike the semi-circle to suit the diameter of pipe. Divide this semi-circle in any number of equal parts and from these points as a-b-c-d draw lines to the corner B. These are the base lines for triangle. The elevation is not needed as it only gives us altitude or height, and this is represented by line O-A'. So with dividers pick the base lines from plan as B-a; B-b; B-c; B-d, also A-a and set in diagram as shown by similar points. Draw lines to O and you have the true lengths.

To start the pattern draw a line at B-C equal to the side of plan. Then pick the true length O-d and using B and C as centers, strike and cross arcs in point d. With dividers pick one of the spaces as a-b from plan and using d in pattern as center strike small arcs at c-c. Then pick true lengths O-c and using B and C as centers, strike arcs in points c as shown. Repeat this until points a-a in pattern are established. Then add the side wings, using the half width A-B of plan and set as

B-A and C-D in pattern. Use true length O-A and a in pattern as center, cross arcs in point A and D. This permits drawing the outline of base, after which the lower apron is added by striking arcs F and drawing lines tangent to it as shown. Other laps for seaming must be allowed extra.

St. Louis Sheet Metal Men in Membership Drive.

The Sheet Metal Consumers Protective Association, of St. Louis, Missouri, met February 13th at the Architectural Club.

The convention committee again reported good progress and in addi-

tion stated that the sub-committee had started to work on their respective duties.

Every one of the twenty-five members present was appointed a committee of one in a drive to materially increase the membership, President Bokern promising a good supply of cigars at the next meeting if there were ten applications in by that time.

A good discussion on correct regulation of furnaces so as to insure a proper burning of coal and getting the maximum amount of heat from fuel consumed, was enjoyed.

Two applications, Mr. Joseph Dressel and Mr. Joseph T. Keightly, were accepted for membership.

Indiana Sheet Metal Contractors Exchange Valuable Trade Ideas at Annual Convention.

Terre Haute Gathering Featured by Interesting Discussions on Problems Encountered by Industry.

THE fourth annual convention of the Indiana Sheet Metal Contractors' Association was held in Terre Haute, on February 21st and 22nd. The attendance was better than expected in spite of the fact that Indianapolis sent a rather small delegation.

The business sessions were marked by interesting discussions. There were no long, "prepared" speeches, but many of the members told how they had solved difficult problems and overcome competition of the low price variety, so that those in attendance went away from the convention more than well repaid for their time and expense.

Wednesday morning's session opened at 10 a. m. with President Joseph C. Gardner, Indianapolis, in the chair. Mayor Ora D. Davis gave a short and hearty address of welcome, which was responded to by Mr. Gardner, the Mayor having been introduced by A. W. Dudley, Terre Haute.

The following committees were announced:

Nominating—W. G. Huettner, Gary; George Pentecost, Terre Haute; H. G. Neff, Gary; John

Balkema, Lafayette, and V. L. Roland, Elkhart.

Auditing—Harry Neal, Indianapolis; J. F. O'Connell, Terre Haute, and Charles Roland, Richmond.

Resolutions—Joseph Mattingly, Indianapolis; A. W. Dudley, Terre Haute; Charles Gatz, Gary, and A. P. Schmitt, Evansville.

Apprenticeship—John Kreidt, Lafayette; W. A. Brown, Marion; W. S. Waters, Indianapolis, and W. F. Stockford, South Bend.



Charles Gatz.

Grievance—William Lautz, Indianapolis; J. F. Hocker, Terre Haute; J. G. Wesbecher, Gary; John Manion, Terre Haute; J. D. Ortmeyer, Evansville.



Leslie Beach.

The session adjourned to meet at 1:30 o'clock, when Edwin A. Scott, of *Sheet Metal Worker*, spoke on the subject of "Overcoming Competition."

During his address Mr. Scott brought out many suggestions as to various methods used by sheet metal contractors and furnace installers in building up their business.

The members and other visitors were then taken for an auto ride ending at the modern plant of the Braden Manufacturing Company, manufacturers of the famous "Champion" Mitre, where they witnessed the manner in which this and other products of the Company are made. The ladies were presented with carnations and boxes of high grade chocolate candy, while those of the so-called "sterner" sex received cigars.

The officers of the Company were all on the job, Mr. Braden himself working at one of the big brakes. Karl Roth and the three Williams Boys—W. E., Claude and Marshall—with Vice-president Vishe acting as guides.

From there, the party traveled to the great plant of the Columbian Stamping and Enameling Company, where the entire process of making enameled wear was demonstrated.

In the evening nearly one hundred and fifty assembled at a splendid dinner during which R. W. Blanchard and his quartet of singers furnished entertainment. No speeches, thank goodness.

The dinner was followed by a fine vaudeville show at the Hippodrome Theatre. Thursday morning's session was started off with reports of the officers and committees, President Gardner's annual address being, in part, as follows:

Part of Annual Message of President Joseph Gardner.

There has been a great deal said about some code for installing furnaces and the matter was placed in the hands of a committee, but so far they have not come to any conclusion. It would be well that some action be taken during the coming year.

The use of composition roofing has swept over the country with a vim, as the material does not cost a great deal and a low priced workman can apply the roofing, it is impossible to compete against it with either metal, slate or tile roofing. Although we can do nothing about it, it is deplorable that so much work formerly done by us should go to this source.

First class mechanics of former years are fast passing away, as the younger generation are not taking any interest in learning a trade, and the trade schools are not giving the young men attending them enough practical work to make them proficient mechanics. We should



Joseph C. Gardner.

make the working conditions as interesting as possible, so as to attract young men to our trade, or in a few years there will be a scarcity of mechanics.

The members' attention has been called to the fact that the amount of the yearly dues now paid is inadequate to carry on the association business and to

pay the per capita tax of the national association. But as no action was taken last year it became the duty of your officers and directors to ask the members to pay an additional amount of dues during the year, therefore this matter should be carefully considered at this meeting and some action taken.



J. C. Henley.

The members of the Jobbers' and Salesmen's Auxiliary have frequently been criticized for the part they have been taking in the sheet metal contractors' affairs, but to my knowledge they have not overstepped their bounds on any occasion and it has always been with pleasure that the officers and directors of our association welcomed their attendance at various meetings.

Our national secretary sent out visiting schedules for members of associations of various cities to follow; it seems in other states this was generally carried out, but in our state I am sorry to say that only two or three visits were made.

During the year one meeting of the officers and directors was held and the treasurer was authorized to pay to the Terre Haute, Indiana, association the money appropriated at last year's convention to help defray expenses of the convention; the committee of the Terre Haute association also attended the meeting and arrangements for this convention were discussed.

The state association has not gained any new members during the past year, but everybody was busy with their own work and association affairs; both local and state were somewhat neglected, but let us start out the new year and see if we cannot gain numerically in strength.

Various committees have been appointed and much is expected of them, and I am sure that they will gladly serve and suggest ideas for the good of the association.

During the month of June the National Association Convention will be held in St. Louis, Missouri. The committees having charge of the arrangements are preparing everything possible so that those attending will have an enjoyable time, but will also derive great benefits by their attendance, so let us hope that Indiana will be well represented.

The report of the Nominating Committee was approved by ac-

clamation, the new officers being as follows:

President—A. W. Dudley, Terre Haute.

First Vice-president—J. Mattingly, Indianapolis.

Second Vice-president—Charles L. Gatz, Gary.

Treasurer—J. D. Ortmeier, Evansville.

Secretary—Leslie W. Beach, Richmond.

W. F. Stockford, South Bend, and H. Watson, Vincennes, newly



E. W. Norman.

elected, and W. A. Brown, Marion; W. S. Waters, Indianapolis; John C. Kreidt, Fort Wayne, and John Balkema, Lafayette, compose the Board of Directors.

Following the election, there was a very animated discussion on furnace selling and installation, the matter of forced distribution by fan attachments and automatic draft control being given much attention, not only for "sick jobs," but also new installations. A. G. Pedersen had charge of the discussion.

After the thanks of the Association had been expressed to the Terre Haute sheet metal contractors and A. G. Pedersen of AMERICAN ARTISAN AND HARDWARE RECORD had charge of the discussion.

Many a hot air dispenser develops cold feet.

Fur-Mets Is New Name of Indiana Sheet Metal Auxiliary.

At the meeting of the Indiana Jobbers' and Salesmen's Auxiliary, held during the closing hours of the Sheet Metal Contractors' Convention in Terre Haute, it was decided to change the name of the organization to "Fur-Mets," composed of the first syllables of the two main products which the members sell.

Herb Symonds, treasurer of the St. Louis Convention Committee, told of the arrangements for the National Convention of Sheet Metal Contractors in St. Louis during the last week of June.

Harry Jones and O. Vorhees were appointed as a committee to make preliminary arrangements for a summer outing of Indiana Sheet Metal Contractors, families, salesmen and friends at one of the lakes in the northern part of the state.

Secretary Paul R. Jordan read a letter announcing the resignation of President Norman, which was accepted with a rising vote of appreciation of Mr. Norman's services.

The report of the Nominating Committee was read and the Secretary instructed to cast the ballot for all nominees, as follows:

President—Paul R. Jordan.

First Vice - President — A. J. Becker.

Second Vice - President — Karl Roth.

Third Vice-President—F. L. Canine.

Fourth Vice-President — F. A. Wilkening.

Treasurer—J. C. Henley.

Directors—E. W. Norman, Phil Geitz, Ralph Ingalls and Harry Neal.

Sergeant-at-Arms — George B. Carr.

Secretary—O. Vorhees.

Membership Committee—H. A. Beaman, W. R. Lawson and F. A. Speaker.

A resolution was voted, thanking the Terre Haute Local for its hearty cooperation, as well as the Braden Manufacturing Company and the Columbian Stamping & Enameling Company, for their many courtesies during the Convention.

The following "Fur-Mets" were present:

Fur-Mets Present.

Beaman, H. A., Haynes-Langenberg Manufacturing Company.

Beeth, F. E., Kruse Company.

Blanchard, R. W., Hart & Cooley Company.

Cooper, L. A., Standard Metal Company.

Fleming, A. T., Standard Metal Company.

Geitz, Phil H., Henry Furnace & Foundry Company.

Gerock, Julius, Gerock Brothers Manufacturing Company.

Gibbons, P. F., The Beckwith Company.

Griffith, E. E., Tanner & Company.

Henley, John C., Tanner & Company.

Hoffeld, E. H., Ferdinand Dieckmann Company.

Jordan, Paul R., Paul R. Jordan Company.

Jones, Harry R., Tanner & Company.

Klein, William A., Braden Manufacturing Company.

Kruse, Robert, Kruse Company.

Lawson, W. R., Excelsior Steel Furnace Company.

McElwain, H. O., Lennox Furnace Company.

Machett, Charles A., Chapman-Price Steel Company.

Mackin, T. Reid, International Heater Company.

Neal, Harry W., Hall-Neal Furnace Company.

Norman, E. W., Merchant & Evans Company.

Oliphant, J. M., The Meyer Furnace Company.

Pedersen, A. G., AMERICAN ARTISAN AND HARDWARE RECORD.

Preyer, A. P., American Rolling Mill Company.

Roth, Karl, Braden Manufacturing Company.

Ross, A. J., The Henry Furnace & Foundry Company.

Scott, Edwin A., Sheet Metal Worker.

Shea, William A., Tanner & Company.

Shuttleworth, J. J., Stratton & Terstege Company.

Symonds, H. W., Symonds Register Company.

Voorhees, O., XXth Century Heating & Ventilating Company.

Watson, A. E., Berger Manufacturing Company.

Wilcox, Rolland, Standard Metal Company.

Wilkening, F. A., Standard Metal Company.

Griffin, H. S., Wise Furnace Company.

Morse, F. H., Hart & Cooley Company.

Carter, E. C., Furnaces and Sheet Metal.

Farquhar, D. R., Tuttle & Bailey Manufacturing Company.

Gordon, W. S., Tuttle & Bailey Manufacturing Company.

Grubbs, Paul F., Follansbee Brothers Company.

Gottschalk, F. S., Utica Heater Company.

Fulton, C. M., Eller Manufacturing Company.

Anderson, F. E., A. W. Dudley Company.

Felix, W. A., Mueller Furnace Company.

Patterson, S. C., Fox Furnace Company.

Nebraska Sheet Metal Man Knows Leading Figures Through AMERICAN ARTISAN.

The Sheet Metal Contractors Association of Nebraska was officially launched at an organizing meeting in Omaha, Nebraska, February 8, as told in AMERICAN ARTISAN of February 17, and in connection with the preliminary organizing steps, Secretary John H. Hussie of the national body has forwarded to this publication the following interesting letter from a Nebraska sheet metal man.

Mr. J. H. Hussie,
Omaha, Nebraska.

I have just received a letter from the National Association of Sheet Metal Contractors of the United States requesting my co-operation in an attempt to organize for Nebraska what is to be known as the Sheet Metal Contractors Association of Nebraska. I regret, Mr. Hussie, that this has reached me so late in life, as I am now in my seventieth year and have practically retired from active life.

However, I wish to say that I have always been a strong believer in organization and consider it the duty of each and every sheet metal worker as well as furnace man of Nebraska to join the above named organization for reasons too numerous to mention. In a single letter. I know it would be a great benefit to all concerned. My only regret, as above stated, is that I have reached the age that it would be useless for me to join any organization now, as I could not take an active part in any of the meetings that I should take if I were a younger man; otherwise I would gladly send in my name (or, better yet, attend the meeting on date given), but am sorry I cannot do so.

In conclusion, I wish to say that in my looking over the list of names appearing on letterhead received, I notice such names as Mr. Seabrook, George Harms, P. R. Biersach, J. Geroch and others—names that I have seen so often in the AMERICAN ARTISAN, a magazine I have been a subscriber to for 30 years or more—

all of which makes them seem like old acquaintances to me.

While I have had the pleasure of meeting you only out of the entire list mentioned.

In closing, kindly accept my kindest regards and well wishes for the new organization, trusting it will start out with a good substantial list of members to make a sure go of it; and anything I can do to enhance its cause on the side line I will cheerfully do.

G. A. BYOR.

Edgar, Nebraska.

(Sheet metal worker and furnaceman of 54 years of active life in above lines.)

Harmony Club Banqueters Photographed at Festal Board.

In our February 17 issue we published an account of a visit January 6 of twenty-seven members of the Harmony Club of The J. M. and L. A. Osborn Company of Cleveland, Ohio, to the Cumberland, Maryland, plant of the N. & G. Taylor Company, makers of tin plate. It was a full day, made up of thorough inspections, excellent luncheon and luncheon talks, games

of the assembled may be recognized. They are, reading left to right:

Seated: L. B. Ticknor, W. H. Kuntzelman, E. W. Shinn, P. H. Diedrich, E. W. Thorp, J. G. Henninger, D. A. Hossler, R. E. Fox, F. A. Wurm, J. A. Decker, J. W. Harrison, H. C. Thomas, C. M. Little, R. A. Stebner, F. O. Carfer, W. B. Green, C. D. Palmer, J. J. Koch, J. T. Roberts, H. W. Brainerd, Charles Hazlehurst, H. J. Smith, R. R. Janke and W. W. Kimble.

Standing: W. B. Osborn, J. R. Read, J. F. Reichert, H. N. Taylor, A. W. Howe, L. L. Helmer, M. M. Gardner and M. W. Morey.

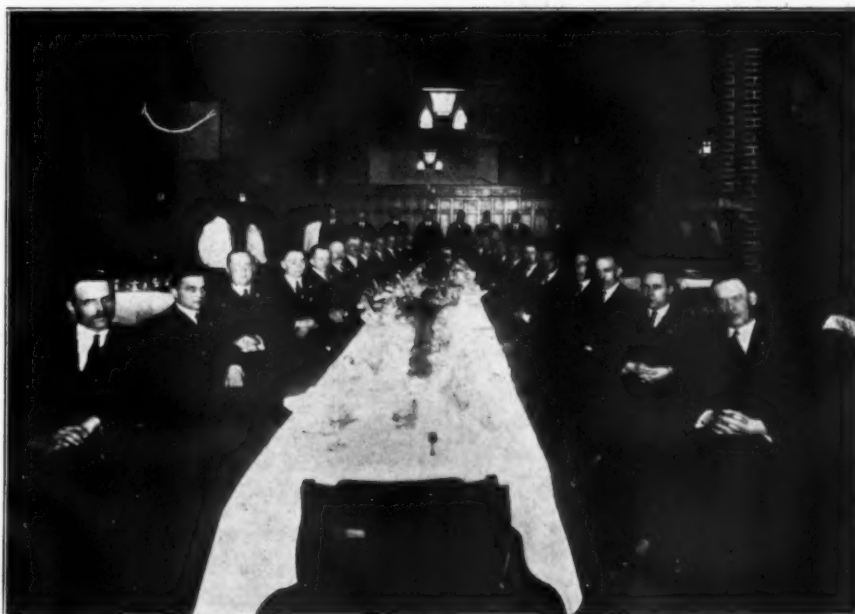
Gibb Instrument Company Increases Capital.

The Gibb Instrument Company, Bay City, Michigan, makers of electric welding equipment, has increased its authorized capital stock from \$75,000 to \$175,000.

Of the increase \$40,000 has been sold at par to provide increased manufacturing facilities and to take care of a rapidly increasing business.

Success Depends Mostly on Efficiency in Selling.

Trade building is to perfect yourself in the game of selling and then multiply yourself by teaching those



Harmony Club Guests of N. & G. Taylor Company.

in the afternoon and at night a sumptuous banquet. Since publishing the article, we have received a photograph of the gathering. In its reproduction herewith, only a few

around you. The day is past in the retail trade when you can buy yourself rich—the business must be builded from the selling end. The time spent in selling is an invest-

ment the same as the money paid for your goods, and should be so reckoned in the theory of selling. In fact, if we could gather up the fragments of time, the wasted moments, hours, the lost motion, the doing of things that don't count in the average retail store, and apply this force intelligently, what a difference it would make in the profits at the end of the year.

Issues Fine Program for Annual Meeting of Wisconsin Sheet Metal Contractors.

The ninth annual convention of the Wisconsin Sheet Metal Contractors Association will be held at Republican House, Milwaukee, March 14 and 15, and the call and program, just announced by Secretary Edward Hoffman, show that a most interesting and worthwhile time lies ahead for the members of the Association, the Auxiliary and friends. Secretary Hoffman says:

"The sessions will open promptly at time stated on program, the time scheduled will be strictly adhered to and the speakers will be prepared and are urgently requested to talk within the time limit as indicated on the program.

"Meetings will be made up of short and interesting talks by men with both practical and theoretical experiences, followed by discussions and questions pertinent to the subject of the sessions." The program follows:

WEDNESDAY, MARCH 14.

9:30 A. M.

Meeting of the Board of Directors.
Registration and Distribution of Badges.

10:30 A. M.—Business.

Address of Welcome—Mayor D. W. Hoan.
Response—John Bogenberger.
Report of Credential Committee.
Reports of Officers—President, Secretary, Treasurer.
Report of Auditing Committee.
Roll Call of Officers and Committees.
Reading Minutes of Previous Meeting.
Committee Reports.
Unfinished Business.
Communications.
Collection of Dues.
New Business.
Proposal and Election of New Members.
Recess—12 noon.

WEDNESDAY, MARCH 14.

2 P. M.

A Practical Exposition and Survey on Furnace Installation—Mr. Otto Geussenheimer, Sheboygan, Wisconsin. Allotted time, 30 minutes.

The Furnace Manufacturer, an address devoted especially to the manufacture and selling of furnaces, their uses, etc.—Mr. J. L. Loell, Milwaukee. Allotted time, 30 minutes.

Furnace and Its Influence Upon Warm Air Heating Industry—H. M. Snow, of Dowagiac, Michigan.

Questions and General Discussions.

Adjournment 5 p. m. sharp.

Banquet at 7 p. m., Convention Hall.

THURSDAY, 9:30 A. M.

Advertising Session.

A Paper, General Ways of Sheet Metal Men to Advertise—Submitted by Mr. C. W. Pansch of Racine, Wisconsin, with his personal observations. Allotted time, 30 minutes.

Good Advertising Methods, Individually and Collectively, for the Sheet Metal Industry—By Walter F. Dunlap, Milwaukee. Allotted time, 30 minutes.

Questions and Discussions.

THURSDAY, 2 P. M.

General Sheet Metal Session.

The Aspect of the Lien Law Applying to Sheet Metal Contractors—Maurice A. McCabe, Milwaukee. Allotted time, 30 minutes.

The Business Outlook—By S. A. Linnekin, Vice President Babson Institute. Allotted time, 30 minutes.

Sheet Metal Products as a Fire Preventive—H. C. Knisely, Chicago, Ill. Allotted time, 30 minutes.

Questions and Discussions.

Election of Officers.

Naming of Convention City.

Officers.

J. W. Black, Pewaukee, Wisconsin, President; J. Harvey Manny, Chicago, Illinois, First Vice President; H. H. Wherry, Milwaukee, Wisconsin, Second Vice President; E. C. Dunning, Milwaukee, Wisconsin, Secretary; E. A. Liesman, Lake Mills, Wisconsin, Treasurer; George P. Carr, Chicago, Illinois, Sergeant at Arms.

Board of Directors.

E. C. Taylor, Dowagiac, Michigan; L. R. Morse, Milwaukee, Wisconsin; Henry Stacker, Neenah, Wisconsin; John Smith, Appleton, Wisconsin.

Entertainment Committee.

E. C. Dunning, Chairman, Milwaukee; N. T. Hilton, Milwaukee; A. G. Pomrening, Milwaukee; E. S. Eaton, Milwaukee; J. Harvey Manny, Chicago.

THE BANQUET, MARCH 14.

Convention Hall at 7 P. M.

TRAVELERS AUXILIARY HOST

Cream of Tomatoes Crouton Souffle
En Tasse

Golden Celery Hearts

Queen Jumbo Olives

Roast Select Tenderloin of Beef

Fresh Mushroom Sauce

Potatoes Long Branch Sifted June Peas

Apple and Cherry Salad

Mayonnaise Dressing

Pineapple Sundae

Assorted Home Made Cake

Percolated Coffee

Republican Special Rolls Assorted Bread

ENTERTAINERS:

Members of Travelers Auxiliary and
Loi Georgiana James' Troupe.

What the Repair Man Needs to Do About the Automobile Radiator.

*E. E. Zideck Explains What It Is,
What It Does, and How It Works.*

Written Especially for AMERICAN ARTISAN AND HARDWARE RECORD by
E. E. Zideck, Instructor in Charge of Sheet Metal Work and Allied
Trades at the Lincoln Institute, New York City.

Sectional Arrangement of Fins.

Lesson 7.

THE newer makes of the fin core are *sectional*. Each row of tubes is housed in a separate fin arrangement to permit their individual removal and replacement.

In a similar way, the extruded tube core is sectional. Seamless tubes of 5/16-in. diam., stamped out at their edges to form a honey-comb pattern, are placed upon each other and their edges dipped in solder. The spaces left between the tubes are *cells* for water to flow through. The inside of the tubes forms the air passages.

Questions.

I. What different makes of *tubu-*

lar cores are there?

2. What different arrangements

3. What is a *sectional* core?

4. Is a *regular* fin core sectional?

5. Which fin core is sectional?

are there in the cellular core?

6. Is a cellular core sectional?

In what way?

7. Which of the cellular cores permits removal and replacement of parts?

8. In a cellular core, how are the various patterned air passages formed?

The Shell.

Over the two tanks and the sides of the core of a radiator slides the *shell*, fastened to it by means of bolts, or, in older makes, solder.

The *shell* is there to cover up the unseemly parts of the radiator and to present a continuance of the hood, which it holds.

In some cases there is no separate shell. The tanks are connected on the two sides by the same material and a finish is added to make a good appearance.

Questions.

1. What is the radiator shell for?
2. How does it fasten to the radiator proper?
3. Are there radiators without a shell?
4. Does the radiator shell hold water?

Radiator Connections.

The radiator connects on to the jackets of the motor by means of its hot water inlet and cold water outlet and parts of hose clamped thereon.

When working properly the radiator *cools* the water coming from the motor just as rapidly as it is heated up by the engine.

Questions.

1. What does the radiator accomplish when in good working order?
2. When is a radiator "out of order"?
3. What part of the radiator does the actual cooling?
4. What use is there for the tanks?
5. Where does the hot water enter the radiator?
6. Where does the cold water leave?
7. What difference is there between a tubular fin core and a cellular core?
8. Is the *shell* removable?

Review.

Write correct answers to the following five questions:

- a. What variations are there in the different makes of the fin core?
- b. What variations are there in the different makes of the cellular core?
- c. What is meant by a "sectional" core, and what is it good for?
- d. What is the object of the shell? How does it fasten to the radiator?
- e. How, and by what means, does

the radiator connect to the motor jackets?

End Part One.

(Follows: *What to do in repairing the radiator.*)

Attention, St. Louis Committee in Charge of Coming Sheet Metal Convention!

That St. Louis committee in charge of arrangements and entertainment for the coming national convention of sheet metal contractors will do well to heed the following news item just received from the Sheet Metal Contractors' Association of Canton, Illinois:

"Canton local appropriated in their 1923 budget thirty dollars to each firm guilty of attending the National convention at St. Louis in June.

"This local seems curious to ascertain just how dry that St. Louis dry committee actually is, and are willing to spend \$150 to appease their curiosity. The pacifier, please!"

Otto Bernz Company Incorporates for \$200,000.

The Otto Bernz Company of Newark, New Jersey, makers of furnaces, torches and plumbers' tools, recently was incorporated for \$200,000. The officers of the corporation are as follows:

Otto Bernz, president and treasurer, founder in 1876; William Bernz, vice president, and connected with the company for 18 years; Joseph M. Imfeld, secretary, and connected with the company for 12 years.

Notes and Queries

Copper Roofing Shingles.

From F. H. Berger, 660 North High Street, Salem, Oregon.

Will you kindly inform me from what firm I may buy copper roofing shingles?

Ans.—Anaconda Copper Mining Company, Metal Roofing Department, 25 Broadway, New York City.

"Robinson" Cornice Brake.

From U. S. Stove Repair Company, 17-19 South Third Street, Minneapolis, Minnesota.

Please advise us who manufactures the Robinson cornice brake, used in sheet metal shops.

Ans.—J. M. Robinson Manufacturing Company, 3282 Spring Grove Avenue, Cincinnati, Ohio.

Model Making.

From John Elliott Cowel, Unadilla, Nebraska.

Will you kindly let me know who will make a perfect model of my recently patented window shade roller for me?

Ans.—American Model and Tool Works, 4945-49 Fulton Street, and The Model Machine Works, 519 West Van Buren Street; both of Chicago, Illinois.

Canopies for Stores.

From Melzer Sheet Metal Works, 774 Bates Street, Appleton, Wisconsin.

Please advise us who makes canopies for stores.

Ans.—Milwaukee Corrugating Company, Milwaukee, Wisconsin; Fred J. Meyers Manufacturing Company, Hamilton, Ohio; and Friedley-Voshardt Company, 733 South Halsted Street, Chicago, Illinois.

Address of The Rubel Company.

From Stove Dealers Supply Company, 310 Chestnut Street, Milwaukee, Wisconsin.

Where is The Rubel Company located?

Ans.—They are out of business, but repairs for some of their products may be secured from The Northwestern Stove Repair Company, 20 West Lake Street, Chicago, Illinois.

Spanish Terra Cotta Tile.

From U. S. Sheet Metal and Copper Works, 616 North Avenue, Milwaukee, Wisconsin.

Who manufactures red and green Spanish terra cotta tile?

Ans.—Ludowici-Celadon Company, 104 South Michigan Avenue, Chicago, Illinois; Mound City Roofing Tile Company, 3301 Morganford Road, St. Louis, Missouri, and Valley Cornice and Slate Company, Limited, Saginaw, Michigan.

No man is so poor that he can't afford to smile occasionally.

Convenience and Comfort Make Strongest Appeal to Women in the Sale of Kitchen Ranges.

Stove Merchants Who Have Made Success Agree That Actual Construction Is of Minor Importance in Selling.

I MET a real, honest-to-goodness stove salesperson the other day, and I use the word *salesperson* advisedly because the "person" I met was a woman, and, believe me or not as you like, she sure knows how

to tempt the dollars out of the pockets of the tightest fisted old farmer I ever saw in my life—and farmers are not her only specialty.

She was the buyer for the stove department of a hardware store in

a city of about fifty thousand people and her record last year was over 300 ranges.

After she had finished putting down the details of a sale I found an opportunity of introducing myself and she told me that she was glad to see me because she had tried out one of the selling campaigns described in *AMERICAN ARTISAN* and it had worked out beautifully—not only in an immediate increase of sales, but also in the securing of a list of prospects out of which she was still reaping results.

The story was one that had been published in the spring of 1921, telling about a Seattle store which in February of that year—when things were considered extremely dull—had actually sold and delivered 104 Monarch malleable ranges.

She told me that when she tried the same plan in 1922 she sold more than fifty ranges in one week—a good record in comparison when you consider the population of the two cities.

But what I really intended to tell about was what she said to me about range selling, because her viewpoint is the one which is accepted by every real salesman in this line, viz.:

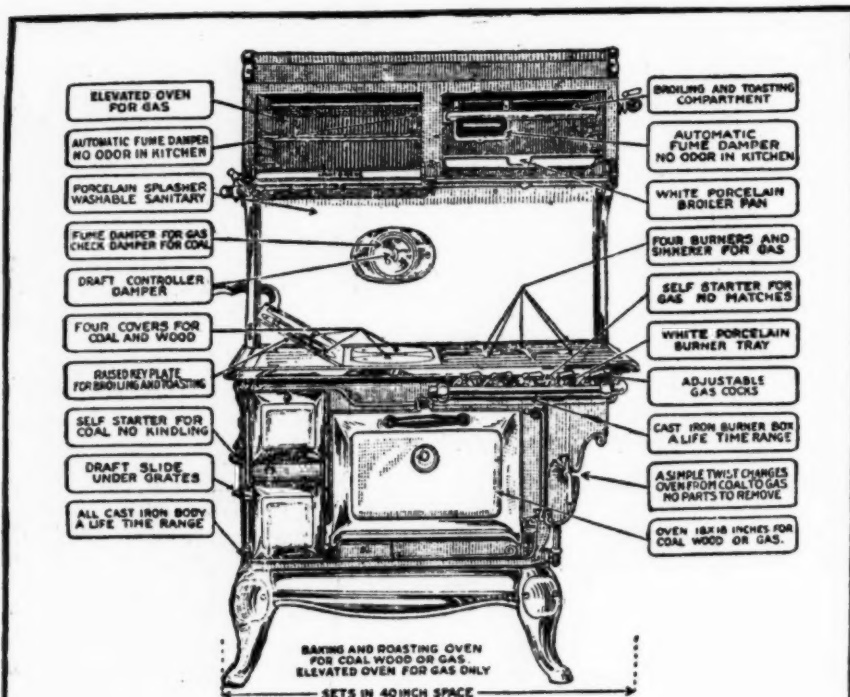
What She Said.

"The prospective customer is not so much interested in the matter of stove construction 'per se,' as Cicero would express it, as she is in what comfort and convenience she will obtain when she buys the range I have for sale.

"Of course, she may like to know something about its construction and the manner in which it should be operated in order to secure the best results.

"But the principal things that she wants to know are:

- "1. Will it bake well?
- "2. Is it easy to operate for



A Whole Year to Pay for It

We want a _____ in every home! That is why we have made it so easy for every housewife to procure one at these unusual terms and prices.

COMBINATION RANGE

Gas—Coal—Wood

With such low prices and liberal terms it is now very easy for you to get a Universal and to rid yourself of that old style stove that is keeping you a slave in your kitchen. Let this modern helper make your kitchen a happy place to work in. The

Combination Range is beautiful, practical, sanitary and efficient. It may be converted into a gas, coal or wood stove in an instant by a mere "twist of the wrist." There is a self-starter for coal and wood. The beautiful Univit Porcelain in blue or gray, the compactness, broiler, elevated gas oven should be seen.

You get all the conveniences of a gas range with all the advantage of a coal and wood range in a _____ Just think! A warm kitchen in cold weather—a cool kitchen in warm weather.

Come in and see the

tomorrow.

LENOCH & CILEK

The Big Hardware and Stove Store
East Washington St. Iowa City

Figure 1.—Excellent Copy Stresses Combination Features.

cooking on the surface and baking or roasting at the same time?

"3. *Does it require frequent attention to the fire?*

"4. *Are there any important (or unimportant) parts which are likely to wear out, rust out, or burn out quickly unless extraordinary care is taken.*

"If the salesman knows how to present the answers to these four questions in such a manner as to convince her that his range is just the range she has been looking for, then he will have a fairly easy time of getting the money.

"But if he goes at it the other way:

"By emphasizing the weight; the highly finished appearance; the careful selection of material; the high priced workmen employed in making the range—even though he may imply that because of all these things his range is a very fine one—he creates in her mind not so much the idea of convenience and comfort—which she really is seeking—as he awakens the idea that all these things must mean that his range is a very high priced one and thus erects a barrier against the sale which is very difficult to overcome.

"To be sure, all of these features are worthy of being mentioned, but only incidentally—in an explanatory way, if you please.

"For example, as in the case of the Copper Clad malleable range, the lining of the parts which are likely to rust with copper is an important feature and should be called to her attention, but only as an explanation or answer to question number four in the foregoing.

"Or in the case of the gas ranges made by the various divisions of the American Stove Company which have the Lorain heat regulators. That appliance, of course, means an extra cost, but we sell her on the matter of increased convenience she gets, because she can set the Lorain at a certain point, light the gas, place the food in the oven, and then pay no attention to it until she wants to serve it. That is an answer to question number three.

"Certainly, all the sales people in this department are drilled thoroughly on all the principal features, and the less important ones, too, of our various lines, but our chief effort is put on the training of their minds along the line of service—comfort and convenience.

"I don't like the term 'talking point.' It means exactly what it says—something that you can talk about, and not a thing of real importance.

"So our sales people do not sell ranges, in the sense that they dispose of so many pounds of cast iron, or malleable iron, or steel.

"They sell service—comfort—convenience.

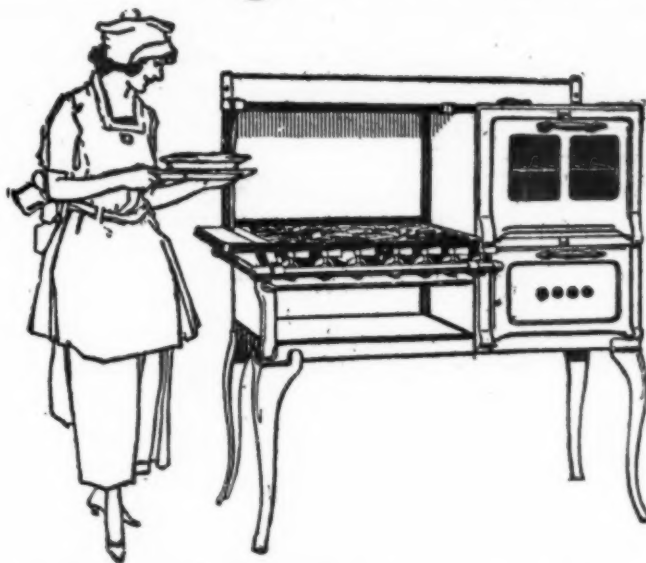
"Because that is what the prospect is looking for, and unless you give her what she wants she does not buy. I am a woman, and I know."

And after all— isn't she right?

Haven't we put too much stress on the fact that our range weighs 550 pounds and therefore it is bound to "stand up" longer than the one which weighs only 475 pounds?

Haven't we emphasized unduly the fact that our range was made of a certain material and that, therefore, it was certain not to rust out as quickly as some other kind.

Get Your New Stove During This Sale



PRICES REDUCED 20%

Just to get ready for our line of new 1923 models, we are making this remarkable reduction on all of our 1922 stoves. There are no exceptions—every one goes. Take advantage of this opportunity to save.

Remember, a telephone call or a letter will bring you what you want, and we guarantee satisfaction.



Figure 2.—This Ad, of Good Appearance, Carries a Prospect Feeler.

Haven't we gloried in the special design of some certain line of ranges that we sold, when as a matter of fact that special design made very little difference in the service one might secure through the possession of that range?

Now—all of these special features, all of these facts are of importance, but only relatively—in proportion to the convenience and comfort and service that they add.

So—you young blossom of a budding stove salesman:

Post yourselves thoroughly on every point of the construction of the ranges you are going to sell.

Absolutely—no question of the importance of knowing how a range is constructed, what it is made of, and why.

But subordinate this knowledge

to the far greater and more necessary knowledge of the factors that go to make the range the really important part of the kitchen equipment it is—its ease of operation, its economy in fuel consumption, its fine baking qualities, its quickness of surface or oven heating, etc.

These are what the customer is primarily interested in.

So why not tell her about them in your most convincing manner—

Using your knowledge of range construction as a sort of basic, non-visible foundation.

And you will sell service—comfort—convenience, instead of so many pounds of iron and steel.

And, incidentally, you will create friends for yourself, for the store that employs you.

Because when you sell any one,

or all, of these three, and actually deliver what you promise—

The customer will always regard you as one who did her a real favor.

And now while we are on the subject of selling ranges, let us take up the so-called silent salesman—the printed advertisement.

Illustrating this article are a number of range selling ads, and they may be studied with profit because they were prepared by experts and designed to sell ranges.

Take the ad published by Leno & Cilek, hardware dealers, of Iowa City, Iowa, published in the *Press-Citizen* of that city. This ad is built about the large cut of the range itself, the features of which are plainly stressed in the typed in boxes, connected by arrows to the points in question.

The second of the two selling arguments, to which this ad is pointed, is the easy payment plan—"A Whole Year to Pay For It." Then emphasizing the triple combination features, there is this excellent piece of copy:

"With such low prices and liberal terms it is now very easy for you to get a — and to rid yourself of that old style stove that is keeping you a slave in your kitchen. Let this modern helper make your kitchen a happy place to work in. The — combination range is beautiful, practical, sanitary and efficient. It may be converted into a gas, coal or wood stove in an instant by 'a mere twist of the wrist.' There is a self-starter for coal and wood. The beautiful — porcelain in blue or gray, the compactness, broiler, elevated gas oven should be seen. You get all the conveniences of a gas range with all the advantages of a coal and wood range in a —. Just think! A warm kitchen in cold weather—a cool kitchen in warm weather."

The ad of the Gross Hardware Company, linked up with a special range sale, has a very neat type dress and generally possesses a good appearance. "Get Your New Stove During This Sale" admonishes the caption, and the ad is illustrated by a clear-lined range and a dainty ap-

THE WIFE SAVING STATION

A Word to the Wives is Sufficient

One of these days; an agent, direct from the Factory will drive up to your door, and try to sell you a steel Range. He will probably Hammer the lids, stand on the door, and do other stunts I do not say his range is a poor one.

But I Sell a Better One For Less Money

I can do all the stunts the other fellow does—but they are of no value I sell a Range that every piece except the grates is made of unbreakable malleable iron or steel In addition to this every inch of the flue plates are covered with vitreous Enamel WHICH WILL NOT RUST

The trouble always has been to buy a Range that will not rust, and with this New Feature of Having the plates Enameled, I believe this stove will out last any stove made I invite you to call and let me show you all the good features of this Range.

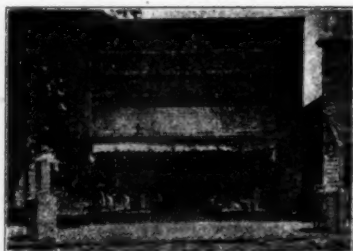
The Malleable Iron Parts

- The solid riveted joints without putty or cement
- The triple walls
- The Mirco Process top that does not have to be blackened.
- The Duplex draft.
- The Enameled Flue Lining
- The Handsome Appearance.

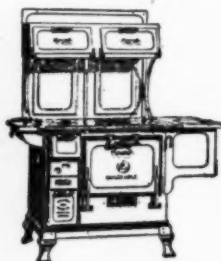
I do not talk as fast or as well, possibly, as the stranger who peddles direct from the factory However this Range I show you will speak for itself

I am here every day in the week to see that you get what you pay for. I have been selling ranges for a number of years in this town and if you or your neighbors ever bought a range of me, it was not misrepresented

I am the Range Man and can and will give you full value for every dollar you spend here.



The House



The Range



The Man

Figure 3.—Unique Envelope Stuffer With Witty Captions.

pearing exemplary of the culinary art.

"Prices Reduced 20 Per Cent" appears next, and, properly, in bold type, but, as has been repeatedly stated, the ad would have had more effectiveness if the price reductions had been plainly marked.

In closing the ad goes after prospects with this suggestion: "Remember, a telephone call or a letter will bring you what you want, and we guarantee satisfaction."

An ad that is unique, but rings with the personality of the merchandiser is that of A. C. Eatinger of Orient, Iowa, which was prepared as a handbill or envelope stuffer. He heads it "The Wife Saving Station," which is no less witty than the sub-caption "A Word to the Wives is Sufficient."

The burden of Mr. Eatinger's selling message is that he has a malleable range to sell, and that its enamel features prevent it from rusting. He hammers hard and effectively on this point, and then proceeds, categorically, to set down other arguments of his good range: the solid riveted joint, the triple walls, the Mirco process top that does not have to be blackened; the duplex draft, the enameled flue lining and handsome appearance.

Instead of the customary large typed store signature at the bottom, the ad carries three small cuts: The House, a half-tone illustration of the store front; The Range, a zinc etching of the range; and The Man, a half-tone likeness of Mr. Eatinger astride a caricatured mule.

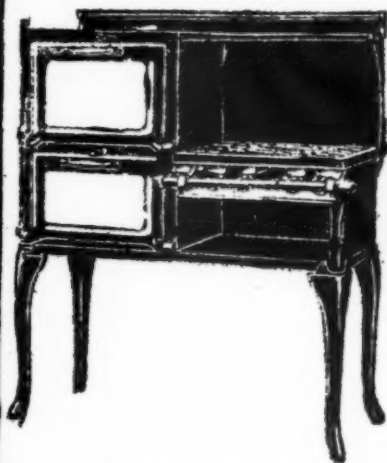
The ad of the Gowan Hardware Company in the Sault Ste. Marie, Michigan, *Times*, as reproduced here, is aimed to sell the Garland range. The ad emphasizes the range's economy in fuel; the store's policy of easy monthly payments, and the range's combination features, but particularly it lays selling stress on "The Labor Saving Lever." It gives this practical illustration:

"Its operation is simplicity itself. To illustrate: You have been cooking with coal but have allowed the fire to go out. Guests arrive unex-

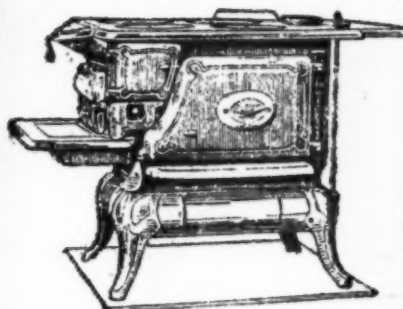
pectedly. A meal must be prepared in a hurry—and how easy it is. *You pull the lever and apply a match to the oven burner.* By the time you have the biscuits, say, ready for

the oven it is ready for the biscuits—and such biscuits—done to a turn and topped off with a rich luscious brown. *There is no other range like it.* There is no other range so easily

A MESSAGE FROM STOVE HEADQUARTERS



\$50.00 up



\$20.00 up

The heating and cooking problem of today with the high prices of fuel is one to be very carefully considered. Therefore, in buying a stove the first question should be, how much fuel will be consumed—2nd, what is the price. Mazurie's sell more stoves than any store in the Twin Cities because they handle only the best makes—stoves that will last a lifetime and at prices that are exceptionally low, quality considered. Then, too, at Mazurie's every stove in stock is a guaranteed fuel saver—which means your heating or cooking bills will be cut from 25 to 50 per cent.

Come in any time and we will show you an assortment of stoves at prices so low they will astonish you.

MAZURIE & SON

THE BIG STORE

226 Water Street, Uhrichsville

Figure 5.—Dignity and Sincerity Feature This Ad.

operated or so nearly "self-starting."

Mazurie & Son of Uhrichsville, Ohio, send out "A Message From Stove Headquarters" in an ad in the *Chronicle* of that city, which we reproduce here. It is a politely worded message, and carries it with a convincing sincerity. A cut of a range and of a stove, bearing the sub-captions "\$50.00 Up" and "\$20 Up," respectively, precede the message, which was as follows:

"The heating and cooking problem of today, with the high prices of fuel, is one to be very carefully considered. Therefore, in buying a stove the first question should be, how much fuel will be consumed—second, what is the price. Mazurie's sells more stoves than any store in the Twin Cities because they handle only the best makes—stoves that will last a lifetime and at prices that

are exceptionally low, quality considered. Then, too, at Mazurie's every stove in stock is a guaranteed fuel saver—which means your heating or cooking bills will be cut from 25 to 50 per cent.

"Come in any time and we will show you an assortment of stoves at prices so low they will astonish you."

Attention also is directed to Fig-

ures 6 and 7, showing a number of range selling ads suggested for a clearance sale. The introduction gives a most plausible explanation of the price reductions, to wit, a discontinuation of the particular lines.

Note that the price reductions are plainly stated, and note particularly that the reduced price is printed in large, bold type.

Omer Thought He Had Made a Nice Profit on the Range He Sold, but He Did Not Know.

Banker Demonstrated to Him That Percentage of Cost of Doing Business Meant That His Selling Price Was Too Low.

OUT in Nebraska there is a stove salesman by the name of R. D. West who has made a real study of the retail end of the stove

and range business. He has sold Monarch ranges in that state for several years and has many friends there.

We are glad to publish the following "story" written by Mr. West, because it brings out an important point in the matter of making the stove department pay a real profit.

Mr. West's story follows:

"A very good day," said Omer Hardwater, as he checked up the day's sales in his hardware store.

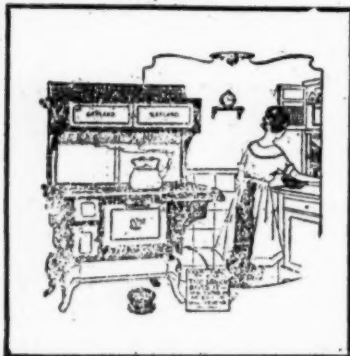
"Two hundred and sixty-nine dollars even, yes, a very good day for a Tuesday."

Omer Hardwater had been in the hardware business for a good many years and as he said, "I've always made a pretty fair living and a little more, so why should I figure my profit in percentages the way they tell me to? These new-fangled ideas are all right for some one who does not know the game, I suppose, but I have been here too long to change now."

"Well, if I could only call all of this money mine it would be a still better day, but I suppose tomorrow, being the first of the month, I will have to send about two hundred to the jobbers and manufacturers. That still leaves me nearly seventy for my profit. If I make fifty dollars on the day's business I'll be all right without knowing much about percentages."

"Anyway, I get more profit out

The Garland



**Cooks Right
Looks Right
Because it IS Right**

It is Economical on Fuel

**You can have one on
Easy Monthly Payments
if desired.**

We have them in various styles—polished blue steel (non-rusting,) concealed smoke pipe and combination Gas and Coal or Wood

The Labor Saving Lever

Its operation is Simplicity itself. To illustrate: You have been cooking with coal but have allowed the fire to go out. Guests arrive unexpectedly. A meal must be prepared in a hurry—and how easy it all is. YOU PULL OUT THE LEVER AND APPLY A MATCH TO THE OVEN BURNER. By the time you have the biscuits, say, ready for the oven it is ready for the biscuits—and such biscuits—done to a turn and topped off with a rich luscious brown. THERE IS NO OTHER RANGE LIKE IT! There is no other range so easily operated or so nearly "self-starting"

25 Per Cent Off on Sleds

To clean up our stock of Children's Sleds we will let them all go at One-Quarter off for one week

Linoleum
Glassware

Pyrex Ware
Chinaware
Paints, Oils and Varnishes

Washing Machines
Carpenters' Tools

Gowan Hardware Co.

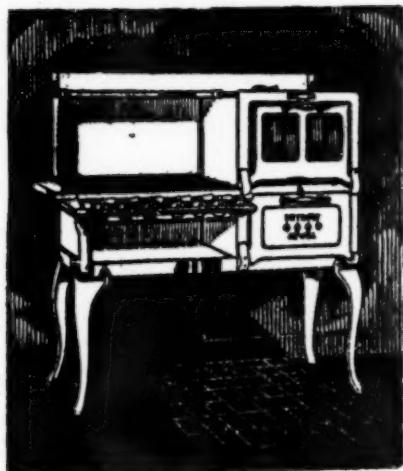
Figure 4.—Seizes One Good Selling Point and Features It.

of the day's sales than any one else who handled the goods I sold to-day."

Omer Hardwater almost chuckled to himself as he locked the store and proceeded to his home. He was tired but he felt elated to think that he had made a profit of at least (he didn't know just how much) fifty dollars that day.

CLEARANCE SALE ON GAS RANGES

Several numbers of recent date and modern in every detail are to be discontinued. You get the saving to be made by this change. There are limited numbers only. Come early for best selection. The values are exceptional. The terms are low.



DELIVERED AND CONNECTED FREE

No. 16-379, Detroit Jewel, all white cabinet Gas Range with Pyrex glass, nickeled frame oven door. Is guaranteed to be of the highest class workmanship, construction throughout with best material. Like cut. Clearance Sale \$98.50
In right hand only

Figure 6.—Dealer Help Advertising Suggestion.

Out in the fresh cold air he continued his musing, and the cool air refreshed his tired mind and muscles. "Wonder where all the profit goes? Figuring on at least one-fourth of my sales as profit every day, I should be rich today. There is a leak somewhere, but I don't know where it is. Guess there is too much spent at our house for hats and groceries. Yes, that is where the trouble is."

On reaching home Omer felt less jovial and almost as soon as he reached the front room he started a lecture to his wife on household economy. As this tirade of advice to Mrs. Hardwater did not bring forth any response, the subject was dismissed and he retired feeling that from now on he would put forth more effort to sell profitable goods and to watch more carefully the household expenditures.

As soon as the bank was open for business the following morning Omer was on hand to deposit the previous day's sales. Now that he had the money in his hand he felt better and greeted the cashier in a more than cheerful manner.

"Well, Omer, you must have had a good day yesterday, did you sell a couple furnaces? Two hundred and sixty-nine dollars is a very good day."

"Yes, sir, it was a good day, and the only big sale was a range. That was one hundred and thirty dollars. But you must remember that in the hardware business that money isn't all profit. You see, that range cost me ninety-seven dollars, and eight dollars freight, so I only have twenty-five left for profit. That's pretty good though, can't sell a range every day, or I'd be rich. Got to deliver it today. Jess Becker gave me the spot cash, so I gave him a teakettle, just to encourage cash buying."

"Then that cuts the profit down still more," remarked the banker. Let's see, the delivery of the range will cost you two dollars, and the teakettle cost you perhaps a dollar." "Two and a half for the teakettle," said Omer. "Then that leaves you only twenty fifty for profit on the sale of the range. That is not as

much as you thought, is it Omer?"

"No, but you got to admit that that is pretty good, for only about fifteen minutes of selling," said Omer. "Wish I could sell one every day."

"That is just it, Omer, if you could sell one every day for cash, you would have the real money making plan, but since you only sell a range now and then, the thing figures out differently. Let's figure this out on paper. Your profit, as we figured it, was twenty dollars and fifty cents, and your cost of doing business must come out of that."

"Now look here, you bankers are always dragging in that cost of doing business. Don't I have that cost whether I sell a range or not? I tell you if I could sell a range every day on the same margin of profit I'd own this bank inside of two years."

"Yes, but Omer if you did own this bank you would lose it inside of the next year the way you figure. It is true you have some expense whether you sell ranges or not, but if you didn't stock ranges you would not have so much expense, would you?"

"That's right," admitted Omer, "but I did make twenty dollars and fifty cents on that sale, didn't I? You can't figure me out of that money, 'cause I have it right in my hand."

"Let's go on with this thing," said his friend. "Your profit, as you say, is twenty dollars and fifty cents. That is approximately sixteen per cent of your sale."

"That's right," said Omer. "If it sounds any better to your ears you can call that per cent instead of dollars, but dollars sound better to me. Can't buy any groceries with percentages, but the dollars talk." And Omer laughed at the wit of his remark.

"Omer," continued the banker, "that sixteen per cent or twenty dollars would be profit if you didn't have the rent, telephone, light, coal and your own and your man's time to charge against that sale. And I am sure that at the end of each



A. B. GAS RANGE
Equipped with broiler pan, drip pan and back and side splash of genuine porcelain enamel, baking oven, door frame highly polished nickel; door panels are convex and white porcelain; has extra large cooking surface and an 18x18-in. baking oven. An unusual value at only **\$43.50**

A. B. Semi-White Gas Range; reg. price \$62.50; Clearance Sale **\$52.50**

A. B. Gas Range with glass door, and white enamel splash; Clearance Sale price **\$39.50**



Detroit Jewel: 16-338, with enamel door like cut; clearance sale price, **\$23.75**



2-burner Laundry Stove, not connected, **\$7.50**
2-burner Gas Plate **\$3.25**

Figure 7.—Note How Price Reductions Are Stressed.

year you figure that at least fifteen per cent of the total sales of your store are required to pay these expenses. You made sixteen per cent on the sale of that range, but your cost of doing business is fifteen per cent, so you see, your profit was only one per cent."

As Omer Hardwater left the bank

he said to himself, "Gosh, it's good I didn't mention the stove pipe I gave Jess with that range, or it would have been figured a total loss of five per cent. But, he is right at that, and from now on I add to my cost of ranges, light, water, coal, salaries and everything else, or I keep them right on my floor. Guess Jess Becker was the one who made the profit on that sale."

Moral: Count the cost before the gain.

Detroit Stove Works Will Make Laurel Furnaces.

Hereafter the Laurel stoves and furnaces, which have been made by the Art Stove Company, will be made by the Detroit Stove Company, Detroit, Michigan, as this concern has purchased the business of the former company and will enlarge the business. The officers are: President, W. T. Barbour; vice-president, W. G. Henry; secretary and general manager, John A. Fry.

How Co-Insurance Clause Works Out in Practice.

Merchants frequently experience considerable dissatisfaction regarding the settlement of fire insurance claims, inasmuch as the amount received is often less than they believe themselves entitled to. In this connection the following statement issued by the Members' Information Service of the Chamber of Commerce of Lawrence, Massachusetts, is of interest.

"Have you ever suffered a fire loss? And when the adjustment was made be disappointed because you received as damages less than you felt you should? More than likely the agent then endeavored to explain to you the much discussed co-insurance clause that is in all mercantile form policies.

"Even if you haven't had a disappointing experience in this matter you had better study your policy now to guard against disappointment later.

"Here is the experience one of your neighbors had some time ago. His stock and fixtures were worth

\$50,000. Since about 95 per cent of all fires result only in partial loss—usually a slight one—he felt it would be a prudent thing to insure for only \$10,000. There was a fire, and the loss was estimated to be just \$10,000. So he sat back and awaited the insurance company's check for \$10,000. The check came. It was for \$2,500. He protested, feeling that he had been defrauded out of \$7,500.

"He hadn't been at all, \$2,500 was the amount to which he was entitled. Here is the way it came out. There was in this contract, as in all policies covering stock and fixtures, a 'reduced rate contribution clause' which made the insured a co-insurer with the company, for it stipulated that the insured agreed to carry insurance to an amount at least 80 per cent of the total value of stock and fixtures. By the terms of that clause the insurance company agreed to pay a proportionate share of the loss. This share of the loss would be the proportion which the insurance bore to 80 per cent of the value of the stock and fixtures. Therefore, since the total value of stock and fixtures was \$50,000, 80 per cent was \$40,000. He carried \$10,000 insurance. This was one-fourth of \$40,000. Hence he received one-fourth of the fire loss, or \$2,500.

"Had the fire loss been \$5,000 the indemnity would have been \$1,250; had it been \$20,000 the indemnity would have been \$5,000. Get the proportion idea?

"This co-insurance clause is standard. The underwriters adopted it about twenty-five years ago to safeguard them against paying maximum losses when the maximum insurance was not carried. This practice, it was felt, was unfair to the insurance companies and so the 'co-insurance clause' was inserted."

Men are all born equal but some of them lost their equality forthwith.

The loss of his job is apt to puncture a man's vanity and let a lot of egotism run out.

Events and Progress of the Hardware Trade.

What the Retailers, Jobbers and Manufacturers Are Doing.
Latest Selling Methods and Experiences of Successful Men.

Old Guard Southern Hardware Salesmen to Meet April 25, at Jacksonville, Florida.

From R. P. Boyd, secretary-treasurer of the Old Guard Southern Hardware Salesmen's Association, comes word that the date and place for the annual convention have been set by President Harper.

Jacksonville, Florida, is the place of meeting, and the time for foregathering is April 25.

"Every member is urgently requested to be present," adds Mr. Boyd.

Communications should be addressed to Mr. Boyd at the office of secretary-treasurer, Box 19, R. F. D. No. 4, Knoxville, Tennessee.

200 Exhibitors, Many Splendid Addresses, At New York State Hardware Convention

Rochester Is Host Third Consecutive Time to Successful Gathering of Empire State Merchants.

WITH more than 200 exhibitors participating, with many speakers of national repute on hand, and with an attendance which taxed the resources of the committee in charge, the New York State Retail Hardware Association held its third consecutive and successful annual convention in Rochester this past week.

The exposition and sessions were held in Edgerton Park, while the headquarters was at the Powers Hotel.

Preceding the convention was the annual meeting and dinner of officers, directors and past presidents at the Rochester Club, Monday evening, February 19.

The convention proper opened with the singing of "America" in Assembly Hall at 10:00 o'clock Tuesday morning, after which the invocation was spoken by Rev. John D. Sullivan. President Henry C. Kelly of Canandaigua then delivered the annual message.

Excerpts from Annual Message of President H. C. Kelly.

Meeting a year ago, we found ourselves in a period of readjustment, price reductions being a thing of almost daily occurrence, and the hardware dealer was found to be honestly passing these reductions on to the consumer. This action had a stimulating effect on all branches of the trade; this was espe-

cially true in the building industry, which since then has gone forward with a much healthier tone than for some time past.

The declining market in the early part of the year was halted at the calling of strikes in the coal fields and was suddenly changed to an advancing market by the rail strike; this was followed by an early autumn depression of farm commodities which reflected upon the sales of merchants in the rural communities, only to be followed by a sharp reaction which left the whole country in a wonder of amazement as to where the money for the late fall and Christmas buying came from.

Speaking of him who buys wisely—no problem of such magnitude confronts the hardware dealer as this one. We must buy in order to sell, we must buy in quantities large enough, often enough and early, so no customer will find us saying, "We have not that." Lost sales are lost profits and lost profits are an injustice to ourselves as well as Uncle Sam.

In most forecasts of the coming year, the fact is emphasized that, in the opinion of a great majority of both buyers and sellers of hardware, the prices are somewhat higher than they ought to be in this general period of readjustment, but that the trade as a whole has so much momentum that there is likely to be rather a high degree of activity with little or any fall in prices for the first six months of the year and it is generally believed that afterward there will be a period of deflation and readjustment. Conditions in the steel consuming industries at the present time are in most cases decidedly favorable to a heavy demand for this article.

Turn over—a subject worn thread bare by discussion and upon which volume after volume has been written, yet no business is perfect and unless a great deal of thought is given to the elimination of dead matter, there will soon be trouble. Every business in order to be

healthy must have a regular system of elimination of moving off dead stock. This should become a monthly and daily business habit. Dead stock retards turn over and turn over is the most deadly weapon with which to successfully combat the mail order houses, cut rate and chain store competition. Turn over adds dollars to your profit account. Turn over is more important than any other problem which confronts you.

Credits, another old timer, yet each and every one of you buy merchandise and whether it comes from manufacturer, jobber or broker, you buy it with a distinct understanding as to terms, and if you are the kind of a merchant you should be, you live up to those terms, and I do not think that there is a man in this room who does not respect and admire a firm that has strict terms and who insists that you comply with them, so why are you as customers of these firms different than the people who expect credit from you?

Have a definite understanding as to terms before the account is opened and see to it that your customer lives up to these terms. It may seem hard if you have never tried it, but the man who has, could not be induced to change back to the old method and the results—you do not lose your customers, they stay with you and pay, and you have the dollars when you need them to meet your own obligations—try it.

Service—This is younger than any other three requisites for a successful hardware store. I will not try to define the word, service, but every one of us recognize it when it comes neatly wrapped up with a purchase. You render service when your telephone is presided over by a courteous and well-posted employee. You render service when you see to it that all customers have instant attention upon entering your store. You render service when you stock the kind of merchandise that the buyers of your community call for. You render service when you fill your customers' orders to their complete satisfaction. Service of this kind will build for your store a reputation no outsider can undermine. Don't tell them about it, but do it.

There followed interesting discussions on "How Much Merchandise Must You Sell to Make a Dollar Profit?" and "How Much of Each Dollar Received in the Course of Business Actually Belongs to the Dealer?" R. J. Atkinson, chairman, and H. B. Dietrich, Salamance, leader. E. R. Graham of Delhi introduced the next topic:

Introductory Remarks of E. R. Graham.

Is the Plan of Definite Credit Terms Practicable in the Retail Hardware Business? Can a Rule for the Payment of Interest on

Past-due Accounts Be Enforced without Antagonizing Your Trade?

Credit has been defined as an exchange of goods for a promise to pay in the future. In simple form the three questions we should ask ourselves about a prospective buyer who asks for credit are: Is he honest? Has he business ability? Has he sufficient resources to meet his obligations when they become due? Being convinced that our applicant for credit is a normally good credit risk, we decide to list him among our "charge customers," and, right here, is where a lot of us fail to live up to the principles upon which all commercial credit should

keeping our credit accounts within reasonable bounds. But this is paying a high price for the assistance as we are paying a far higher rate of interest than we would anywhere else, and, in reality, is not the money for the use of which we are offering 2% really our own?

This leads to the question of whether or not interest can be collected on past due accounts. Accounts sold on a thirty-day basis are frequently not paid until forty-five or sixty days have elapsed—at times not even then. The merchant who consents to having payments deferred in this manner is virtually lending his capital to the delinquent debtor with-

search and Publicity Manager, Cyclone Fence Company, Waukegan, Illinois.

Excerpts from Speech Delivered by John W. Gorby.

The Bible refers to the "Seven Stars" as leaders in the firmament. What are the seven stars in the Hardware trade? A great American writer also advises to "Hitch Your Wagon to a Star," and Theodore Roosevelt added, "But, remember that your feet are on the ground," all of which we believe to be sound doctrine in modern business.

The seven stars of the Retail Hardware Trade are as follows:

- First: Accurate Records.
- Second: An Organization that is Loyal, Systematized and Enthusiastic.
- Third: Cheerful Environment.
- Fourth: A Consistent, Consecutive Advertising Policy.
- Fifth: Buymanship.
- Sixth: Up-to-dateness.
- Seventh: A Stock Turnover of at Least Three Times Per Year.

Accurate Records.

A store with inaccurate records is like a ship sailing the high seas without a compass. It doesn't know where it's going, but it's on its way. Records that are carefully kept are absolutely indispensable in retail merchandising success. The best system of records that we know anything about for the retail hardware dealer, is the system provided by the National Retail Hardware Association, with offices at Argos, Indiana. These record blanks are not only strictly up-to-date, but are being revised from time to time as experience justifies. The Income Tax requirements of the Federal Government, have helped a lot in forcing upon many business men the keeping of accurate records. Many a man has learned the value of accurate records too late, in fact, after his banker has served notice that no more renewals will be permitted.

The up-to-date merchant will not overlook the fact that the good-will of his banker is a large element in the success of the modern merchant, and the banker's co-operation is undoubtedly one of the strong foundations on which the modern merchant must build. There is nothing that will cause you to stand in better with the banker than the keeping of accurate records based directly upon the system above recommended. At your request, a representative of the National Retail Hardware Association will call upon you, analyze your requirements, recommend a system of record-keeping, and assist you in its installation at a cost to you less than it could be installed by anyone else.

Loyalty.

The second of these guiding stars is Loyalty. Loyalty all through the organization is an invaluable quality—one which it will be well worth your while to cultivate.

You will of course play fair at all times with your clerks. The best way to win their esteem, respect and support is to convince them that you have their own best interests at heart. This can be done by your helping them to become more efficient, through studying with them the best course in retail selling that you can find. Remember, it is your duty to make not only money, but men.



John B. Foley.

be asked or given. Is it not perfectly reasonable to assume that a person who desires to obtain our goods in exchange for a promise of future payment should be willing to agree upon a date upon which such payment is to be made? The big fellows make them. Why shouldn't we? Let me read from the form of "application for credit" as used by Lord & Taylor. * * * You will notice the cold-blooded way in which they go about looking up an applicant's record and financial standing. This ought to stiffen the back bone of the smaller dealers.

If the exact time of payment has been agreed upon in advance, it develops upon the debtor, in case he becomes delinquent, to show cause why the amount is not paid according to agreement. Too many of us take the position of regarding the customer's payment of his debts as a favor, leaving with him the impression that such payment may be withheld if it is not entirely convenient for him to make it at the time it is due.

This mistaken attitude is responsible for many bad debts and unpaid bills. If we would remember that what we virtually do when we put \$10,000 worth of our merchandise into the hands of our customers is to give them the use of \$10,000 worth of our capital for the period of the credit terms, whether that be thirty, sixty or ninety days. Some of us offer a discount of 2% for the payment of an account on the tenth of the month following purchase, to assist in

out any compensation whatever. Since the debtor, if he were to borrow the money at the bank, would have to pay interest upon the loan, there appears to be no good reason why the merchant's capital should not be entitled to equal earnings while in the debtor's possession beyond the regular credit period.

As a matter of fact, the merchant is really entitled to more than the usual six per cent per annum, as under ordinary circumstances he could earn more than that by employing the money in his business. Theoretically, we are entitled to interest on past-due accounts, but is it practical? A single sale of a wrench or a pair of pliers amounts to nothing. What we are all trying to do is to build up a list of customers who will be steady buyers, and, for this reason, we can ill afford to take measures that will alienate their good-will, even when their actions reduce us to the point of exasperation. Lots of times it is better to go to the rescue of a bad debt with a life line than with a shot gun.

Wednesday morning the officers and committees gave their reports, after which there was a discussion on "Store Records." At 11:30 a. m. the delegates listened to an exposition on "How to Sell Your Goods" by Captain John W. Gorby, Re-

Cheerful Surroundings.

The loyalty of which I speak will be greatly increased if the surroundings are cheerful and inspiring. Your store must be clean, bright and shining. Nothing so retards progress like dirt or rust. Both show stagnation. Someone has said that there isn't any such thing as "dead stock"—there is merely dead salesmanship. Is this true? Remember this also—that while the stock might be old to the salesman, when cleaned up it is new to the customer. Whatever deadness it has to the customer is what is indicated by the salesman's presentation of it. Therefore, strive to keep the stock clean, bright and shining, not only for the effect on the trade, but also for the influence on the selling staff.

Buymanship.

The next star that points toward Success for the retail hardware dealer is *Buymanship*. It is a large subject, much too large to be adequately discussed as a subtitle in a Convention speech. A few suggestions, however, may be offered.

1. The buyer must have before him the Post Record of purchases and sales for the period in question covering several years back.

2. He must have before him the sales quota set by him or some one of equal or higher authority for the next two or three months.

3. In order to protect himself and his house, the Buyer must have some knowledge of materials and their cost to manufacture.

4. The Buyer must keep in touch with market conditions so that he may know if possible something of the business cycle and its progress.

5. Year by year records should be kept of the rates of stock turnover in each line as well as the ideal rate to attain in order to reach the desired rate for the entire store. If this is low, the Buyer should report it to the Sales Department for speed-up, so that the store may not suffer by slow moves.

Up-to-Date-Ness.

The next star of progress to which the successful dealer will look with hope is that his store must be "up-to-date." Just what this means is hard to define. Let it suffice to say that it is such a store as a progressive merchant will have if he attends Conventions regularly and reads his trade papers carefully and takes advantage of the many excellent ideas therein offered by successful merchants and students of business affairs. When Socrates was asked to define "Beauty," he said, "Certainly—Beauty is a beautiful girl." So, if you press me for an answer to this question, I shall say that I have found stores that answer this description in all parts of our country. A few of them are the following:

H. G. Beatty & Company, Clinton, Illinois; W. E. Phipps, Greensboro, North Carolina; The Gray Hardware Company, Coshocton, Ohio; Dowling-Schultz Hardware Co., Danville, Illinois; Woodward & Walton, Carlinville, Illinois, and Perkins Hardware Company, Waukesha, Wisconsin.

It is perhaps unjust to the many beautiful stores it has been my honor to visit, to mention any names at all, but I am sure that the above will answer the question as to what I judge a progressive hardware store to be. These are best known by the term "Up-to-date-ness."

Turnover.

Finally, it is imperative that a business be a growing business. The population is growing—buying power is growing—you and I are getting older—our stores must grow or we are going back. If our stores are not growing we should speedily find the reason why. These questions will serve to wake us up if our business is not growing.

1. Have we too many slow movers? (A) In Salesmen. (B) In Stock.

2. Do we need new blood? New ideas? New lines?

3. Is our expense too large in certain lines? Here is a table used by successful dealers to guide them:

Rent, 3.41%; salaries, 10.11%; supplies, 0.6%; delivery, 0.91%; advertising, 1.12%; bad debts, 0.31%; heat and light, 0.43%; general expenses, 2.01%; interest and taxes, 0.99%; depreciation, 0.52%. Total, 20.41%.

"What Are Your Five Best Sellers and Why?" was the theme of a selling talk by H. P. Aikman, Cazenovia.

Wednesday was "Retail Salesmen's Day," and the evening program was given over to the "Asso-



R. J. Atkinson.

ciates," a special program being enjoyed at the Temple Theater.

H. A. Cornell furnished the delegates an interesting report of the 1922 National Hardware Congress Thursday morning.

C. D. Johnson, Poughkeepsie, was the leader of the sales topic of the day.

Introductory Remarks of C. D. Johnson.

What do members think of paying clerks a percentage or bonus on their sales? Would you pay it on all sales or on an excess of a predetermined amount? Does the bonus plan create friction among employees?

In my estimation this is a matter in which we are all more or less inter-

ested, if it can be worked out in a practical way and be the means of inducing the boys on the floor to sell more goods, then it's what we as proprietors are after.

We all know that if one is interested in a financial way or if there is something to be gained of a financial nature he will throw a little more pep into the job; however, this has not worked out exactly so in my own experience, sad to relate.

Last June we decided to try out the bonus plan. We have on the floor three men, including my son. I had noticed for quite some time than when a customer entered the store, the boys would apparently have something of extra importance to do just at that particular time and the result was one would hang back, expecting the other to wait on the customer; many times to save the situation I would sail in and attend to the customer myself.

I made up my mind that this sort of thing had to stop, and stop quick, so I called the boys in the office one night after the store had closed and told them we were going to put into effect a bonus plan which would be in addition to their salary, that the more goods they sold the more money they would get, and that it was up to them to be on their toes.

This bonus was to be 1% of their sales and to cover both Cash and Charges. The only restriction was that on a few lines sold to some of the factories where we were obliged to make a close price there would be no commission paid the salesman.

Well, things started off fine, and I was more than pleased; said to myself, "guess I've struck the keynote," but my hopes were to be shattered, as in a few months I began to observe that the novelty was wearing off and they were getting slack, seemed as though they were perfectly satisfied to take what came their way without any extra exertion, and let the rest go.

I will make an exception of my son, who has kept up the same enthusiasm as he had at the start and by so doing it has kept him on the jump in trying to attend to customers as fast as he possibly could.

It may be I have not established the plan as it should be; in fact, I think now that in paying a bonus to salesmen a commission should not be given until their sales reach a certain amount, and I'm in hopes that when the subject has been discussed some of you who have tried it out will tell us what success you have had and those of us who are interested will be in a position to determine the best plan to follow.

"What Is Good Advertising?" was the topic of an address by W. J. Hoyt, Wellsville.

At noon the Washington Birthday address was delivered by Dr. William K. Wickes, former historian, Sons of the American Revolution, on "American Ideals, Old and New."

The annual banquet was the event of Thursday evening. It was held at the Powers Hotel. The address of the occasion was Horatio S. Earle's "Peptimistic Optimism."

Committee reports was the order Friday morning, after which the delegates were addressed by C. H. Casey, president, National Retail Hardware Association, on "Distribution Costs."

Part of Address of C. H. Casey, President National Retail Hardware Association, on "Lowering Costs."

Now then, what are we to do about it? We are not against a theory, we are faced by staring facts, stubborn facts, the principle is basically sound—from the manufacturing and selling for cash. Every bit of unnecessary expense eliminated and the lowest possible cost obtained.

What did the jobber do to meet the situation? Did he reduce his expense and make an effort to educate his dealers to make like economies in order to meet the catalogue prices? He did not. He "poo-pooed" the idea as long as he could, and increased his salesmen in an effort to keep up his volume; he spared no expense, but as was customary, added it on to the price of the goods. "Monkey does as monkey sees," and we retailers followed suit until we now have a load on top of the manufacturer's first cost that is almost too much to bear, and you and I know that the consumer is not bearing it patiently and uncomplainingly.

Don't you think it is time that the jobber curtails on some of his expensive habits and gets back to something near his original starting point, or if he has any other way that accomplishes the same result—that of reducing his overhead to about half of what it is today; that he build his catalogue with the thought in mind that a large percentage of his business is to come by mail, keeping his customers posted on the latest and lowest prices on his entire line and doing everything possible to make it easy for his clients to do business with him without the executive expense of so many travelers.

There is no one who has a higher regard for the traveling man than I have, for he has been my friend for many years and if I did not honestly feel it necessary to curtail expenses in the selling field, I would most certainly not say what I have. He is a thoroughbred and I am sure he will adapt himself with the rest of us to the changing conditions.

Other methods of wholesaling are being tried out and if the old established methods do not exert themselves they may realize them too late, that they have been supplanted by newer and more economical methods.

Perhaps we too will be seeking new jobs if we do not fulfill our present ones with greater efficiency. There is an insistent demand for lower cost of distributing that we must not ignore. We must wake up and keep in step with the times; we must be real merchants and not shop keepers. The country, no doubt, owes us a living, and is willing to pay for it if we can furnish force collection. The best way I know to collect from the public is to make yourself so valuable to the community that "the populace will make a beaten path to your door, even though you be located in a wilderness."

The manufacturer recognizes this and he is looking around to see what he can

do to assist. Many of those who have stood loyally by the regular channels of trade up to this time are finding that they are losing out, because when he adds his profit and heavy overhead and cost and ships along to the jobber and he likewise adds his profits and heavy overhead and then sends the goods along to the retail store, there is such a burden of expense added that they will not sell alongside of goods of a like character that were more economically marketed.

The manufacturers, too, have economies to work out that should not only reduce the actual cost of making the goods, but will, if properly carried out, reduce the cost of warehousing, reduce insurance and interest charges and increase the number of stock turns. He can do all those things not only for himself but for the jobber and retailer as well.

I refer to the simplifications programme inaugurated by Secretary Hoover with whom the National Retail Hardware Association is in hearty accord and have worked so well and faithfully with him that he has now put a special man in charge of hardware merchandise only.

It seems to us that if manufacturers will give serious thought and honest action to this subject, there is a great possibility in it. We also think that if they had taken the matter as seriously as they might have, and inaugurated other economies in their factories, there would not have been a necessity for the recent advances in almost all manufactured goods. Advances have and are now doing a great deal to retard our return to normalcy.

Why not take a lesson from the efficiency of a certain automobile manufacturer who, in the face of advances by most other concerns, has steadily reduced his prices and apparently is still making money. It looks, to an outsider, that the manufacturer is sometimes a little over-willing and grants concessions too easily, and then they not only add this increase to the cost but a considerable profit to the increase.

The story is told that the common labor in a certain factory, last fall, asked for and received an increase of 10 cents

per hour in their pay. This factory, so the story was related, is equipped with a great many automatic machines and the great part of the labor employed is composed of skilled mechanics who received no advance. Yet, on account of the increase of 10 cents an hour to their common labor, they raised their price 10% on the entire line, justifying their action by the statement that there might be further demands for increased pay.

Nevertheless, the manufacturer is making up and realizes more fully now than ever before, the necessity for the retailer to prosper and that he must be able to buy his goods so as to meet the advertised prices of the direct-to-the-consumer concerns when a reasonable valuation is placed on his services.

We realize that it is the retailer's price that the public knows and he also realizes that the retailer is the collector for the manufacturer and the jobber as well as for himself, and that he must collect not only the cost of the goods but all the overhead expense that has attached itself to the price of the goods and that it is only natural that he gets the greatest blame for high prices when the fact is, he is less responsible than any of the other factors.

At Atlantic City a special committee was appointed to study distribution problems and to seek out ways of reducing costs by the elimination of any wastes or unnecessary expenses that may be found. Mr. Arthur B. Birge of St. Louis was made chairman of that committee and is working faithfully to accomplish something. We are hoping that a good preliminary report may be made at our Richmond meeting in June.

Wholesalers have also been studying comparative costs for some time. It is presumed they are seeking some method of relieving the public from every unnecessary expense burden in the preferences of their function.

Resolutions, nominations and election of officers closed the convention. There was considerable discussion of next year's meeting place, Rochester representatives urging a new meeting place be chosen.

1,000 Delegates at Minnesota Convention View Northwest's Finest Hardware Exposition Duluth Gathering Hears Speakers of National Reputation—Closes With Visit to New Steel Mills.

THE twenty-seventh annual convention of the Minnesota Retail Hardware Association, held at Duluth last week, attracted more than 1,000 visitors, who enjoyed the most complete and comprehensive display of light and heavy hardware ever shown in the Northwest and a program of speeches and entertainment second only to a national convention.

For the occasion Duluth and Duluth business men did their utmost and there was not a dull moment

from the hour Tuesday morning when the Armory was thrown open to the visiting delegates to the final business meeting Friday evening.

The convention formally opened at 1:30 p. m. Tuesday, with the address of President Elmore Houghtaling.

Annual Message of President Elmore Houghtaling.

The year just past started out with a general feeling that the country was over the worst of the financial depression and was started on the way to normalcy. You who live in agricultural districts, know that there is still a long, hard trail to travel before you can feel that

you are again on the road to prosperity. And when you hear each day of advancing prices, and know that you will have to pass them on to your farmer customers, you feel like saying "How long, Oh Lord, how long?"

When the "buyers' strike," as it was called, was on, the manufacturers claimed that on account of not being able to work full capacity, their overhead was so great that they could not reduce prices very much. But no sooner did the country begin to buy more freely and factories begin to work on full time, with output contracted for in advance, than from every quarter we heard the cry, "goods are going up." And at the same time the things the farmer has to sell are being marketed at prices that in many instances are below the cost of production.

I am surprised every day to see how long-suffering our farmers are, and how bravely they have taken the blow of having the prices of their products cut to a pre-war basis. And then compare their attitude with that of labor in man-

cause I want to warn you against being stampeded by the salesman who tries to get you to buy large quantities because prices are going up. But I say to you to "watch your step." Scrutinize every purchase you make carefully, and by all means look after your collections and credits.

Try your utmost to discount every bill, even if you have to borrow the money to do so. I believe, as I think you all do, that we are going to finally get over all the unrest and agitation caused by the great war, but we must each and everyone of us try and live as sanely as possible and thus do our share toward that end.

We are going to try to make this convention a means toward making better merchants out of you, so that you can better serve your several communities and make more money for yourselves. We have men here to tell you about advertising and window displays, or about stove arrangements. We can help you with your bookkeeping problem, or with any legal matters you want advice on.



H. O. Roberts.

ufacturing centers, which in most cases has absolutely refused to consider any reduction in wages.

But I am fearful that if they do not have relief, the farmers of the Northwest are not always going to be as patient as they have been in the past.

We hear a great deal of efforts to give them relief by more credit. In many cases more credit would only make their condition worse. Our governor has called a meeting for the purpose of what he calls "Stabilization of prices of farm products." How futile this is. What we need is some action to "stabilize" the demands of the manufacturers and labor unions and make them see that prosperity of our country can only be restored by meeting the farmers half way in adjustment of the relative values of their products.

The only salvation for the farmer as things are now, is in practicing rigid economy, which, if they do, will not mean large business for the merchant.

I am calling your attention to this be-

All we are going to ask of you is to feel free to get right up and speak of anything you may have had in mind.

The report of Secretary H. O. Roberts and Treasurer D. M. Andrews next were presented.

At 2:30 p. m. was held the annual meeting of the policy holders of the Retail Hardware Mutual Insurance Company, a subsidiary of the Retail Dealers' Association. The insurance company officers reported a total of \$2,358,618.77 in gross premiums written in 1922, making the total gross insurance in force \$123,992,968. The company insures only retail hardware and implement dealers.

The insurance company is now planning a new building in Minneapolis to house their activities. A site has been secured at Nicollet avenue and Twenty-fourth street. The building, which will be constructed this year, will be three stories and basement, and will cost



J. A. Monson.

\$250,000, according to President Charles F. Ladner of St. Cloud.

At Wednesday morning's session H. H. Riner, Argos, Indiana, delivered a message from the national association.

The principal address of the session was on "Stock Profits and Balances, the Cube of Modern Merchandising," by George W. Schroeder, Eau Claire, vice president Minnesota Retail Hardware Association.

Thursday morning was given over to the election of officers and an address on "How to Organize for Aggressive Selling," by Frank Stockdale, of the Stockdale Service, Inc., Chicago.

At the afternoon session an interesting discussion was led by Miss Frances P. Lapham, Rural School Supervisor, Deer River, on "The Farmer's Wife and Retail Store."

Friday the delegates were guests of the American Steel and Wire Company. Special cars carried the visitors from Duluth to the company's steel mills at New Gary, West Duluth, where after an enjoyable inspection of the plant a luncheon was served.

Suggestions and Plans for Window Displays.

Instructive Examples from Exhibits in AMERICAN ARTISAN AND HARDWARE RECORD Window Display Competition.

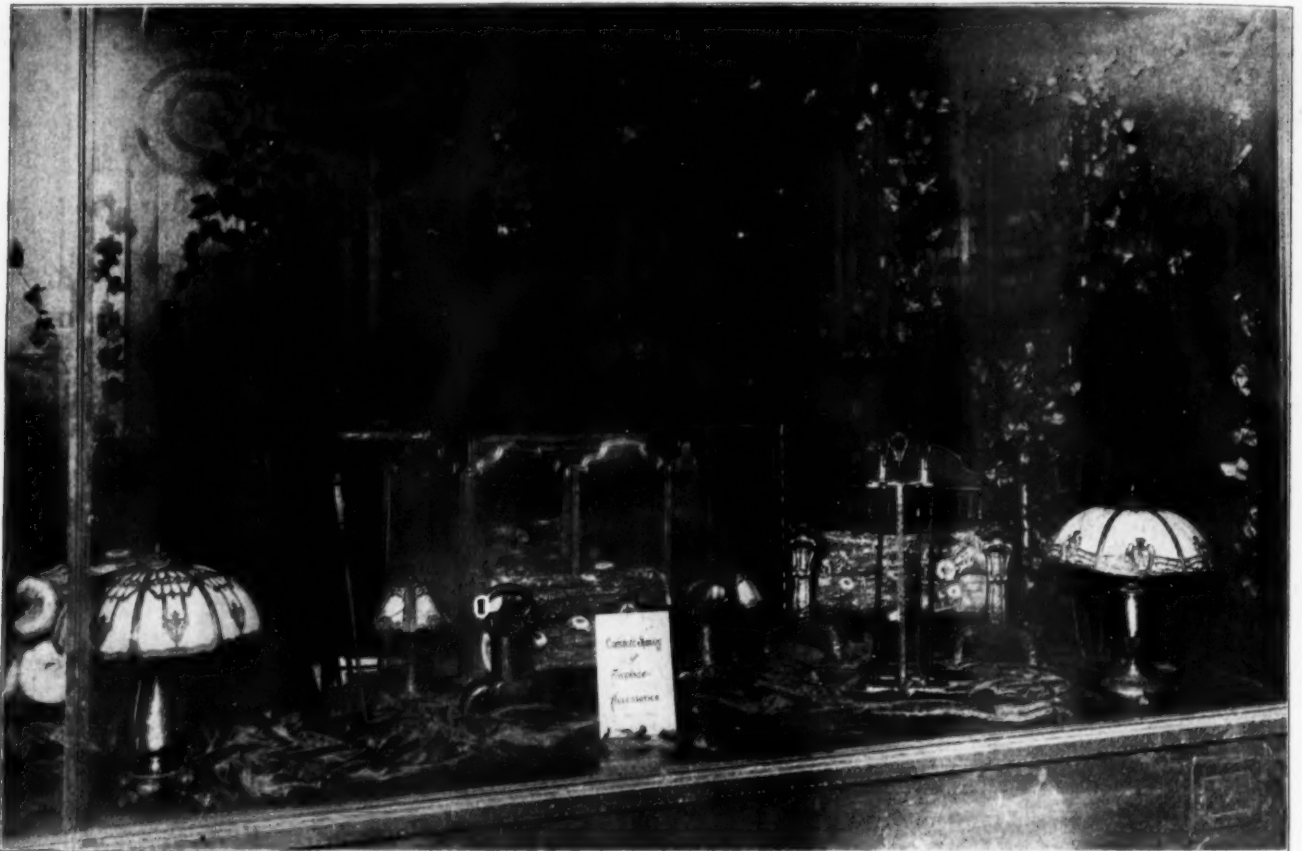
Fireplace Accessories Display Attracts Trade.

To the store which prides itself on the fine quality of its products and which may occasionally or at all times cater to the more wealthy trade, the window described here-

lamps. This window was especially beautiful at night with a soft light from the lamps reflecting upon the rich brown velvet draperies and the gleaming brass, which harmonized so effectively with the foliage and the walnut."

does it compel him to walk inside?

A *successful* store window does this. Not all of us are gifted sufficiently to construct such a window, but we can try. It is to stimulate this ambition that AMERICAN ARTISAN AND HARDWARE RECORD



Display of Fireplace Accessories Designed by Otto J. Gress for the Bunting Hardware Company, Kansas City, Missouri.

with will be of particular interest.

The design was by Otto J. Gress of the Bunting Hardware Company of Kansas City, Missouri, and was put on "between seasons," at a period of the year a little later than this.

"This window was one of the most attractive windows that we had in the spring," writes Mr. Gress. "The background was foliage, festooned on panels of Circassian walnut. The foreground shows an arrangement of fireplace fixtures, including brass and japanned fire screens, fire sets, andirons and table

Note the simplicity and resulting effectiveness of this design. Observe also the neatly printed window card, with its subtle suggestion: "Complete Showing of Fireplace Accessories."

Why You Should Enter Window Display in American Artisan Contest.

Does your store window "see" clearly? Does it express the spirit of your store? Does it intrigue the interest of the passerby? Does it hold him for a moment—and then,

carries out its annual window display contest.

Below we republish the cash prizes offered for the best window designs. Creative window designers will recognize that the cash prizes are secondary but to be recognized by AMERICAN ARTISAN's board of award is, in deed, a *real honor*. Here are the rules:

The window display must be photographed, and the display may be made up of goods from any of the following lines: General hardware, machinists' supplies, builders' hardware, automobile supplies,

sporting goods, fishing tackle, house furnishings and paints, cutlery, dairy supplies, stoves, ranges, warm air heaters, sheet metal or kindred lines.

The photograph, together with description of how the window display was arranged and the materials used, may be sent by mail or express, charges prepaid, and must reach this office *not later than April 1, 1923.*

Each photograph and description must be signed by a fictitious name or device and the same name or device must be placed within a sealed envelope containing the real name and address of the contestant, this sealed envelope to be enclosed with the photograph.

AMERICAN ARTISAN AND HARDWARE RECORD reserves the right to publish all photographs and descriptions submitted in the contest.

Four prizes, totaling \$100, are to be awarded for the entries adjudged the most meritorious. These are: First prize, \$50; second prize, \$25; third prize, \$15; and fourth prize, \$10.

Three Big Points in the Adjustment of Claims.

The three elements essential to a successful adjustment of a customer's complaint are self control, a smile and the information that the store stands ready to make an adjustment satisfactory to the customer, regardless of where the fault lies, according to E. R. Messick, of the Strawbridge & Clothier store, at Washington, D. C.

"There should be no quibbling or argument with a customer concerning a claim," he says in a recent issue of the store's house organ. "It has been said the customer is always right and, while we all may not subscribe to that statement, there is no disputing the fact that, right or wrong, an adjustment should be made, even at a loss to the business. It should be made to retain the confidence of the customer and assure her leaving with a feeling of perfect satisfaction and good will toward the business.

"There is a psychology about adjustments which is not generally appreciated. A customer may make a claim which, without proper thought, seems unreasonable—but is it? Some circumstance, some incident, a word from a friend or relative, has created an impression or idea in the mind of that customer. She is earnest and sincere, and whatever the adjuster's thought might be concerning the justness of the claim, he should put himself in the customer's place, for the time being, and look at the situation from the customer's point of view. His duty is to satisfy and convince the customer. This may be accomplished by sympathy, smiles—real smiles, not grins nor smirks—and a sincere interest in her problem."

Coming Conventions

Michigan Sheet Metal and Roofing Contractors' Association, Bay City, February 26, 27, 28 and March 1, 1923. Frank E. Ederle, Secretary, 1121 Franklin Street, S. E., Grand Rapids, Michigan.

Missouri Retail Hardware Association Convention and Exhibition, Marquette Hotel, St. Louis, Missouri, February 27, 28 and March 1, 1923. F. X. Becherer, Secretary, 5106 North Broadway, St. Louis, Missouri.

Iowa Sheet Metal Contractors' Association, Sioux City, Iowa, March 14, 15, 1923. R. E. Pauley, Secretary, Mason City, Iowa.

Wisconsin Sheet Metal Contractors' Association, Republican House, Milwaukee, Wisconsin, March 14 and 15. Edward Hoffman, Secretary, 279 Lake Street, Milwaukee, Wisconsin.

Illinois Sheet Metal Contractors' Association, Decatur, Illinois, April 4 and 5, 1923. Fred Gross, Secretary, Quincy, Illinois.

National Warm Air Heating and Ventilating Association, Cleveland, Ohio, April 18 and 19, 1923. Allen W. Williams, Secretary, 52 West Gay Street, Columbus, Ohio.

American Hardware Manufacturers' Association, Spring Convention, Windsor Hotel, Jacksonville, Florida, April 24, 25, 26 and 27, 1923. Frederick D. Mitchell, Secretary - Treasurer, 1819 Broadway, New York City.

Southern Hardware Jobbers' Association, Windsor Hotel, Jacksonville, Florida, April 24, 25, 26 and 27, 1923. John Donnan, Secretary-Treasurer, Richmond, Virginia.

Old Guard Southern Hardware Salesmen's Association, Windsor Hotel, Jacksonville, Florida, April 25, 1923. R. P. Boyd, Secretary-Treasurer, R. F. D. 4, Knoxville, Tennessee.

Hardware Association of the Carolinas, Columbia, South Carolina, May 8, 9, 10 and 11, 1923. T. W. Dixon, Secretary-Treasurer, Charlotte, North Carolina.

Arkansas Retail Hardware Association, Marion Hotel, Little Rock, Arkansas, May, 1923. L. P. Biggs, Secretary, 815-816 Southern Trust Building, Little Rock, Arkansas.

Southeastern Retail Hardware and Implement Association, covering Tennessee, Alabama, Georgia and Florida. Auditorium Armory, Atlanta, Georgia, May 15, 16, 17 and 18, 1923. Walter Harlan, Secretary-Treasurer, 701 Grand Theater Building, Atlanta, Georgia.

National Retail Hardware Association, Richmond, Virginia, June, 1923. Herbert P. Sheets, Secretary-Treasurer, Argos, Indiana.

The National Association of Sheet Metal Contractors, St. Louis, Missouri, June 25 to 29, 1923. E. B. Langenberg, Secretary, 4057 Forest Park Boulevard, St. Louis, Missouri; E. L. Seabrook, 608 Chestnut Street, Philadelphia, Secretary.

Missouri Sheet Metal Contractors' Association, Statler Hotel, St. Louis, Missouri, June 25, 1923. Otto E. Scheske, Secretary, 3818 Maffitt Avenue, St. Louis, Missouri.

Retail Hardware Doings

Alabama.

The Noojin Supply Company, Gadsden, will incorporate with a capital of \$25,000, and will be open for business on March 1st.

Arkansas.

Jeffrey Brothers Company, Batesville, have sold their stock of hardware to Erwin and Craig.

R. C. Phelps will open a hardware and implement business at Oklahoma.

At Ozark, Shamblin Brothers have opened a new hardware store.

Illinois.

The Downers Grove Hardware Company of Downers Grove are improving their store.

Indiana.

George C. Gebhardt will open a new hardware store at 4802 East Michigan Street, Indianapolis.

Iowa.

Luidaman and Brower have sold their hardware stock at Parkersburg to Will Anderson and Harry Jael.

Kansas.

M. J. Boyle has sold his hardware store at Frankfort to Joseph Dwerlkotte of Marysville.

Nebraska.

The Elquest Hardware Company of Torrington has sold its hardware stock to Hofgard Hardware Company. A. J. Elquest is one of the members of the new firm.

North Carolina.

A new hardware company, to be known as the Clark-Higgins Hardware Company, will open very shortly on East Trade Street, Charlotte.

North Dakota.

The firm of Donovan Brothers Hardware Company at Bowbells, consisting of Jerry Donovan and J. B. Donovan, has been dissolved. J. B. Donovan will continue the business alone.

Ohio.

The Mitchell Hardware Company, Dayton, has been incorporated with a capital of \$25,000. Incorporators are Reginald T. Mitchell, Amy C. Mitchell, J. I. Brandenburg, George W. Ozias and Ervenc R. Horn.

Review of Conditions in the Metal Markets.

General Situation in the Steel Industry. Report of Prices and Tendencies in Sheet Metals, Pig Iron, etc.

Non-Ferrous Metals

Continue Strong Trend.

The upward march of the non-ferrous metals continued unabated throughout the week just closed. Tin went to 43.12 cents. Electrolytic copper advanced to 16 cents. Zinc was firm at 7.65 cents. New York prompt. Lead was unchanged at 8.15 to 8.25 cents.

Copper.

Electrolytic copper advanced to 16 cents, delivered over the next few months. The current buying movement is thought to be the largest since the war, and is augmented by increased buying from abroad. In fact, all last week the Copper Export Association was selling in excess of its daily quota. A sale to a domestic consumer of 2,000,000 pounds at 16 cents, delivered in April, was reported.

The American Brass Company and others announced price advances in copper and brass products on February 10, 15 and 17. The last advance amounted to about $\frac{1}{4}$ cent, and brass sheets, high and low, are now $20\frac{1}{8}$ and $21\frac{3}{4}$ cents; brass wire, $20\frac{5}{8}$ and $22\frac{1}{4}$ cents; brass rods, $18\frac{3}{8}$ and $22\frac{1}{2}$ cents; brass tubes, $27\frac{1}{8}$ cents, and sheet copper, $23\frac{1}{2}$ cents a pound. Bare copper wire and hot rolled copper rods are quoted on application only. Transactions on the London Metal Exchange in copper yesterday have been exceeded in tonnage only a few times in history, and amounted to 800 tons of spot and 5,200 tons of futures. Under this impetus prices there advanced as follows: Standard, £1 2s 6d, spot closing at £68 17s 6d, and futures at £69 12s 6d; and electrolytic, £1, spot closing at £75 10s, and futures at £76.

Zinc.

Futures in the New York zinc market are still below prompt, but there is a tendency to close up the

differential in sympathy with the foreign market. February is offered at 7.30 cents, East St. Louis basis, but even the far-off positions such as May and June are quoted at 7.20 cents.

Buying has been less active, but the condition is firm. Producers are very well sold up for February and March, and are at present in no hurry about pressing for orders for April and May.

Domestic demand is quiet, but the prospects from that direction are regarded as excellent.

We quote: New York prompt, 7.65 cents; East St. Louis, 7.30 cents.

Lead

The situation is not materially changed, and immediate demand is quiet, though no slackening is evident in consumption.

The holders of spot lead in the Middle West are still obtaining a premium over the price of future shipment and do not show any particular inclination to cut the price, though with the smaller volume of recent orders the figure asked might be shaded somewhat.

New York prompt is 8.15 to 8.25 cents; East St. Louis, $8.12\frac{1}{2}$ to 8.25 cents.

Tin.

Tin recorded more advances in the domestic market. The earlier deliveries and positions of straits and straits shipments closed at 43 cents early in the week, but later the price went to 43.12 cents. The feature of the market, however, was the added strength to the futures position, and whereas shipments in later months have been available at concessions for some weeks past, they now command a premium of an eighth of a cent over prompt. This was due to an increased demand for futures.

It is hard to say whether specu-

lators or consumers are responsible for the heavy business done of late on the London Metal Exchange, but either way it is putting prices there up rapidly.

The Far Eastern market advanced £5 over the week-end, straits in Singapore closing at £199 15s c. i. f. London yesterday. Sales in Singapore Saturday amounted to 185 tons and yesterday to 125 tons. Sterling exchange advanced a cent between the last two trading sessions in London, and a further advance yesterday put it to \$4.70, the highest price since March 20, 1919, when it touched \$4.71.

Old Metals.

Wholesale quotations in the Chicago district, which should be considered as nominal, are as follows: Old steel axles, \$20.50 to \$21.00; old iron axles, \$26.00 to \$26.50; steel springs, \$23.50 to \$24.25; No. 1 wrought iron, \$18.00 to \$18.50; No. 1 cast, \$22.25 to \$22.75, all per net tons. Prices for non-ferrous metals are quoted as follows, per pounds: Light copper, $10\frac{1}{2}$ cents; light brass, $6\frac{1}{2}$ cents; lead, 6 cents; zinc, $4\frac{1}{2}$ cents; and cast aluminum, $16\frac{1}{4}$ cents. The demand for nearly all lines is heavy.

Solder.

Chicago warehouses quoted solder prices as follows: Warranted, 50-50, per 100 pounds, \$28.50; commercial, 45-55, per 100 pounds, \$27.50; and plumbers', per 100 pounds, \$25.25.

Sheets.

The long predicted advance in the sheet market is not yet an accomplished fact. Not a few sales have been made at advanced prices, but there are still some mills that have not advanced. Some mills are at old prices, technically, and at the same time out of the market, the general policy of independents being not to sell beyond the current



The best advertisement of all

WHEN everything is said and done, what is the best advertisement of all for a sheet-metal man?

Beyond any manner of doubt, it is a good job well done.

The printed word is all right in its way, but it has to be backed up by actual performance before it really becomes convincing. When you have finished a job to the complete satisfaction of a customer, the job itself stands out as a tribute to the excellence of your workmanship.

Good workmanship is possible only when a man has the proper materials to work with. A sheet-metal worker is

no different from any other worker. He can do his best work only when he is using the best sheet iron.

ARMCO Ingot Iron is the purest iron manufactured in commercial quantities. It resists rust and under similar conditions it outlasts steel of the same gauge and finish.

Because of its purity, it takes galvanizing better; a closer bond is established between the iron and the zinc coating.

If you are interested in advertising yourself as a high-grade sheet-metal contractor, use ARMCO Ingot Iron. It has made a reputation for us and it can do as much for you.

THE AMERICAN ROLLING MILL COMPANY, Middletown, Ohio



ARMCO

TRADE MARK

INGOT IRON

Resists Rust

quarter. The American Sheet & Tin Plate Company is also out of the market, but with the difference that it has sold through the second quarter at the old prices.

Many of the independent sheet mills have advanced their prices and some sales at the advanced prices have been effected. If the principle is being generally followed, of not selling for second quarter, the advanced prices obtained are for early deliveries, and therefore may be regarded as involving a delivery premium. Advances range from \$3.00 to \$5.00 on blue annealed and black sheets and from \$5.00 to \$8.00 on galvanized sheets. Some mills are increasing the spread between black and galvanized from 1.00 cent to 1.15 cents, which accounts for the extreme advance in galvanized being higher.

The full market range is 2.50 cents to 2.75 cents on blue annealed, 3.35 cents to 3.60 cents on black and 4.25 cents to 4.75 cents on galvanized.

Tin Plate.

Being well supplied with orders, the tin plate industry is endeavoring to run to the physical limit and the principal restrictive influence appears to be difficulty in pickling. It is noticed that some of the mills are much more disposed to ship product in the black than to tin. There is freer selling of tin mill black than of tin plates, and some plants are anticipating shipments against their black orders.

Accordingly there is a disposition to predict that tin plate will be higher for the second half of the year. The leading interest is sold out for the present half year, except that it has little prospective terne plate production to sell, but there is no likelihood that it will do anything as to second half for several weeks.

American Brass Company Again Advances Prices.

The American Brass Company this past week advanced prices of finished copper and brass $\frac{1}{4}$ cent to $\frac{1}{2}$ cent a pound. Seamless tubing, which had remained stationary for

a day or two, was advanced $\frac{1}{2}$ cent a pound. All other rolled and drawn products were advanced $\frac{1}{4}$ cent a pound. This makes a total advance of 1 cent a pound since February 15th. Buying continues active.

Consumers are importunate in

their demands, and the higher prices seem to only stimulate purchases. The demand for wire and sheets is especially active. Shipments are being made rapidly against contracts and current buying and the mills continue to have capacity sold for six to eight weeks ahead.

Railroads Buying Steel for Repair Work; Pig Iron in Firm Position, Market Calm.

Bessemer Is Quoted at \$28 and Basic at \$26 at Valley Furnaces.

RAILROADS continue to place orders for steel for repair work to be executed at their own shops. Eastern mills have booked several satisfactory orders for alloy steel for automobile forgings and also several important orders for bars, billets and plates for repair work at railroad shops.

Recent orders of the latter have amounted to about 15,000 tons. More bridge work also is developing, but these latter orders are not expected to be placed until about the middle of March.

The stronger fundamental position now occupied by pig iron is well recognized throughout trade circles, but the market absolutely refuses to grow excited over the situation. There was a general but slight stiffening last week, and the position is maintained, but actual advances are not recorded. Producers are disposed to quote slightly higher prices from time to time, but have no notion of trying to force the market up rapidly. Consumers are more or less interested but are refraining from putting out large inquiries. They show no signs of departing from their policy of buying from hand to mouth or for only short distances ahead.

The great thing that has occurred in pig iron, of course, is that several steel works have withdrawn as sellers of pig iron in the past couple months, while two have instead become buyers of Connellsville coke. That is, recently some steel works were competitors of merchant furnaces in the sale of the merchant furnace finished product while now

they are tending to be competitors in the purchase of one of the raw materials of the merchant furnace.

With this change in the steel works' position as to pig iron and coke, with the very substantial advances that have occurred since the first of the year in semi-finished and finished steel prices and with the comfortable manner in which the merchant furnaces have been able to play the waiting game in the market for the past two months, it is plain that the pig iron situation has grown much stronger, and on the surface it would appear that prices ought to advance easily.

There is, however, another factor. Buyers of pig iron have been expecting the price to decline, and pig iron could be stronger merely by the decline not occurring. It would be a second and additional thing for the price to advance.

It appears now that some of the steel works that run on purchased pig iron are covered farther ahead than was recently supposed, some being probably covered through June instead of simply to April 1st. The foundries, however, probably have a good bit of iron still to buy for second quarter.

We quote the market very firm at \$28 for Bessemer and \$26 for basic, at valley furnaces, with sellers endeavoring to obtain higher prices, quotations being out at \$28.50 on Bessemer and \$27 on basic. Sales of consequence above \$28 and \$26 respectively do not seem to have occurred. Foundry remains quotable at \$27 to \$28 according to tonnage and delivery.